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ABSTRACT

This manual provides a discussion of methods and responsibilities involved in the curriculum development process used by the Interstate Distributive Education Curriculum Consortium. Following an introductory chapter, the second chapter presents ten steps for conducting occupational task surveys: determine occupational scope, develop task statement, construct task lists, determine needed task information, determine needed respondent information, design task survey questionnaires, administer task survey questionnaires, process task survey data, write competency statements, and evaluate competency statements. Chapter 3 gives nine steps to be used in developing learning activity packages: cluster competency statements in LAPs, organize LAPs by curriculum sections, write objectives, write learning activities, write instructional materials, write tests and keys, check LAP for completeness, evaluate LAPs, and revise LAPs. The final chapter outlines four steps to use in field testing curriculum materials: plan field-test activities, implement field-test activities, evaluate field-test data, and revise field-test materials. (Curriculum development forms used by the IDECC are appended.) (LRA)

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SYSTEMATIC PROCEDURES FOR IDECC CURRICULUM DEVELOPMENT

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1: Determine Occupational Scope

2: Develop Task Statement

3: Construct Task Lists

4: Determine Needed Task Information

5: Determine Needed Respondent Information

6: Design Task Survey Questionnaires

7: Administer Task Survey Questionnaires

8: Process Task Survey Data

9: Write Competency Statements

10: Evaluate Competency Statements

11: Cluster Competency Statements into LAPs

12: Organize LAPs by Curriculum Sections

13: Write Objectives

14: Write Learning Activities

15: Write Instructional Materials

16: Write Tests and Keys

17: Check LAP for Completeness

18: Evaluate LAPs

19: Revise LAPs

20: Plan Field Test Activities

21: Implement Field Test Activities

22: Evaluate Field Test Data

23: Revise Field Test Materials

Illustration I presents the systematic procedures for IDECC curriculum development in flow chart format.

CHAPTER I

INTRODUCTON AND OVERVIEW

The Curriculum Task Force of the Interstate Distributive Education Curriculum Consortium (IDECC) described the role of IDECC as follows:

> The role of IDECC is to develop and disseminate systematic approaches for the planning, organizing, directing and evaluating distributive education curriculum for specific occupations in marketing and distribution. Further, IDECC curriculum will be competency-based -- including materials for testing, content documents, learning activities, behavioral objectives and related support materials. (IDECC, 1978)

In an effort to provide useable guidelines for future IDECC developmental efforts, the project staff has developed this manual concerning systematic procedures for curriculum development based on the recommendations of the Curriculum Task Force as modified and approved by the IDECC executive committee (See Appendix A).

The reader is guided through a series of steps and procedures which describe specific recommendations concerning the IDECC curriculum development process. The manual provides a detailed discussion of methods and responsibilities involved in the curriculum development process.

Overview of the Systematic Procedures for IDECC Curriculum Development

The basic steps of the systematic procedures for IDECC curriculum development are as follows:

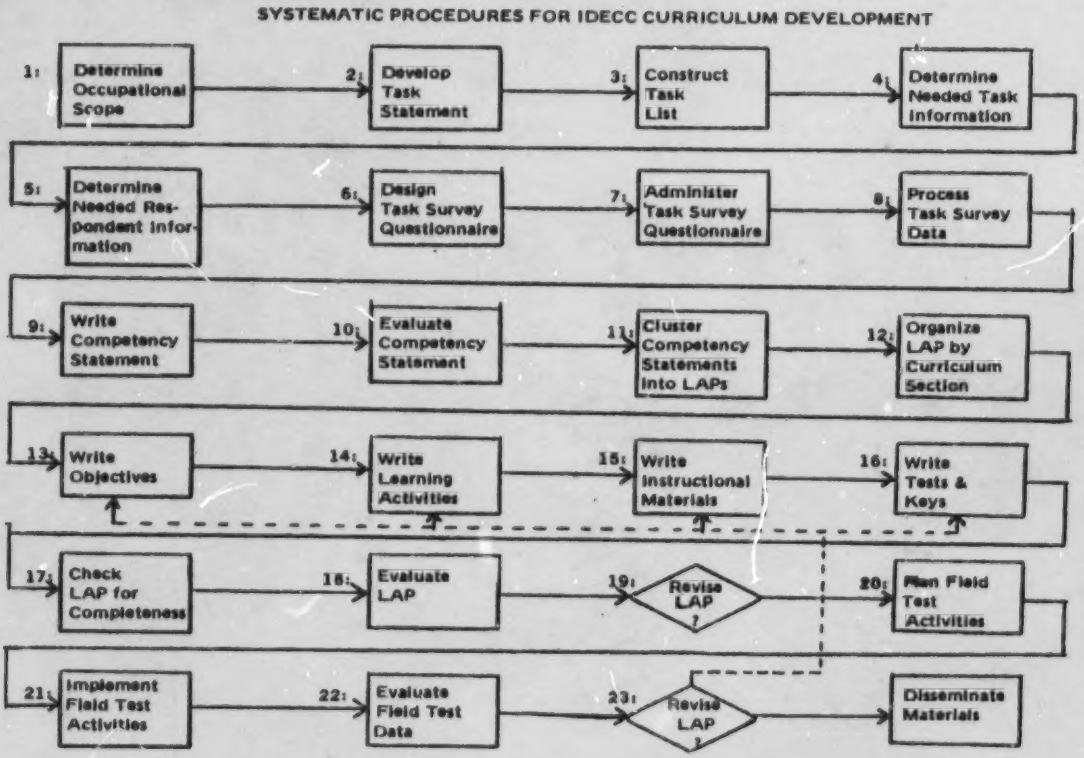

SYSTEMATIC PROCEDURES FOR IDECC CURRICULUM DEVELOPMENT
1: Determine Occupational Scope
2: Develop Task Statement
3: Construct Task List
4: Determine Needed Task Information
5: Determine Needed Respondent Information
6: Design Task Survey Questionnaire
7: Administer Task Survey Questionnaire
8: Process Task Survey Data
9: Write Competency Statement
10: Evaluate Competency Statement
11: Cluster Competency Statements into LAPs
12: Organize LAP by Curriculum Section
13: Write Objectives
14: Write Learning Activities
15: Write Instructional Materials
16: Write Tests & Keys
17: Check LAP for Completeness
18: Evaluate LAP
19: Revise LAP ?
20: Plan Field Test Activities
21: Implement Field Test Activities
22: Evaluate Field Test Data
23: Revise LAP ?
Disseminate Materials

Illustration 1.

CHAPTER II

PROCEDURES FOR CONDUCTING OCCUPATIONAL TASK SURVEYS

Introduction

This task survey process is adapted from a five-volume series entitled, "Performance Content for Job Training," developed by the National Center for Research in Vocational Education at the Ohio State University. It is a systematic and data-based approach for determining curriculum content for occupational preparation. The task survey process systematically identifies occupationally relevant requirements as the training content of curriculum materials.

Ammerman and Pratzner (1977), having studied curriculum content derivation systems, explain that:

> The intent of the system is to aid developers and planners of occupational curriculums in their efforts in education, business, industry, and government to (a) determine the task performance content of jobs for which students are to be prepared, and (b) select from a large body of verified job content that which is most important for training consideration. The system largely depends upon task data obtained by survey questionnaires from person closest to, and most knowledgeable about actual performance and its requirements. It will be most cost effective in repeated surveys of occupations, in situations where an instructional program is being developed or verified for use in many institutions or instructional settings (such as is done by state and regional vocational curriculum laboratories) or by industrial training departments that service multiple subsidiary units. The procedures are intended to be of special benefit where there is uncertainty with regard either to relevant performance or appropriate curriculum content, or where

there is need to establish the job-relatedness and merit of existing curriculums. (p. 7)

This section of the IDECC procedures manual describes the procedures for conducting occupational task surveys. In adapted form, the sequential steps for conducting occupational task surveys are:

Step 1: Determine Occupational Scope

Step 2: Develop Task Statements

Step 3: Construct Task Lists

Step 4: Determine Needed Task Information

Step 5: Determine Needed Respondent Information

Step 6: Design Task Survey Questionnaires

Step 7: Administer Task Survey Questionnaires

Step 8: Process Task Survey Data

Step 9: Develop Competency Statements

Step 10: Evaluate Competency Statements

This ten-step process represents a modified version of The National Center for Research in Vocational Education's, "Performance Content for Job Training," (Ammerman & Pratzner, 1975; Ammerman 1977a; Ammerman 1977b; Ammerman & Essex, 1977; Mead, Essex & Ammerman, 1977) with appropriate operational specifications and exceptions previously identified by the Interstate Distributive Education Curriculum Consortium.

Procedural Steps of the Task Survey Process

Step 1: Determine Occupational Scope

When determining the occupational scope of interest, one question of concern is, "What are the occupations within levels of employment for the distributive education instructional program code that is to be studied?

The IDECC national office through the executive committee and curriculum task force has established planning considerations which provide a rationale to identify occupations within new instructional program codes as well as additional occupations within existing instructional program codes.

Review United States Office of Education (U.S.O.E.) Instructional Program Codes. The IDECC national office has given consideration to the occupational taxonomies that are presently represented by existing IDECC curriculum materials as well as current curriculum development efforts. The current occupations represented in IDECC curriculum materials are clustered according to U.S.O.E. Instructional Program Codes as opposed to the previous occupational clusters of department store, variety store, food store, hotel motel, restaurant, service station, and wholesaling. Expansion in terms of future occupational task surveys is needed in the following nine U.S.O.E. instructional program codes:

1. Automotive, Recreational & Agricultural Vehicles and Accessories Marketing
2. Floristry, Farm and Garden Supplies Marketing
3. Hardware and Building Materials Marketing
4. Home Furnishings Marketing
5. Industrial and Institutional Marketing
6. International Marketing
7. Personal Services Marketing
8. Business Services Marketing
9. Sales and Marketing, Other

AN ALIGNMENT OF OCCUPATIONS REPRESENTED IN IDECC CURRICULUM MATERIALS
WITHIN U.S.O.E. INSTRUCTIONAL PROGRAM CODES
FOR DISTRIBUTIVE EDUCATION

U.S.O.E. Instructional Program Codes		Occupations Represented in IDECC Curriculum Materials
04.01	ADVERTISING & DISPLAY SERVICES	DEPARTMENT STORE: Advertising Manager Display Helper Assistant Display Manager Display Manager
04.02	APPAREL AND ACCESSORIES MARKETING	SPECIALTY STORE: Sales Assistant Assistant Manager Manager
04.03	AUTOMOTIVE' RECREATION, & AGRICULTURAL VEHICLES AND ACCESSORIES MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.04	FINANCE AND CREDIT SERVICES	BANK: Teller Staff Assistant Branch Manager Vice President
04.05	FLORISTRY, FARM AND GARDEN SUPPLIES MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.06	FOOD MARKETING	FOOD STORE: Assistant Manager Checker Grocery Clerk Head Cashier Head Grocery Clerk Store Manager
04.07	FOOD SERVICE MARKETING	RESTAURANT: Assistant Manager Busperson Cashier Head Waiter /Waitress Host/Hostess Manager Waiter/Waitress
04.08	GENERAL MERCHANDISE RETAILING	DEPARTMENT STORE: Advertising Manager Assistant Buyer Assistant Credit Manager Assistant Display Manager Assistant Receiving Manager Buyer Credit Interviewer Credit Manager Department Manager Display Helper Professional Salesperson Receiving Clerk Salesperson Stockperson VARIETY STORE: Assistant Manager Buyer Checkout Cashier Commissioned Salesperson Head Cashier/Bookkeeper Marker Office Clerk Personnel Manager Salesperson Section Manager Service Desk Stockroom Supervisor Store Manager
04.09	HARDWARE AND BUILDING MATERIALS MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.10	HOME FURNISHING MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS

Figure 1: A chart identifying occupations represented in IDECC curriculum materials within U.S.O.E. instructional program codes.

U.S.O.E. Instructional Program Codes		Occupations Represented in IDECC Curriculum Materials
04.11	HOTEL, MOTEL AND LODGING SERVICES	HOTEL/MOTEL: Assistant Manager Bell Captain Bellperson Building Superintendent Catering Manage Chef Executive Housekeeper Manager Night Auditor Purchasing Agent Recreation Directo Reservation Manager Room Clerk Sales Manager Service Superintendent
04.12	INDUSTRIAL AND INSTITUTIONAL MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.13	INSURANCE MARKETING	Personal Lines Rate Clerk Assistant Underwriter Underwriter
04.14	INTERNATIONAL MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.15	PERSONAL SERVICES MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.16	PETROLEUM MARKETING	SERVICE STATION: Assistant Manager Attendant Manager/Dealer
04.17	REAL ESTATE MARKETING	Salesperson Broker
04.18	RECREATION MARKETING	CRUISE SHIP: Reservation Sales Agent Group Sales Agent Reservation Manager District Sales Manager (continued next column)

U.S.O.E. Instructional Program Codes		Occupations Represented in IDECC Curriculum Materials
		TOURIST ATTRACTION: Cashier/Receptionist General Entry Operator–Ride or Boat Lead Operator–Ride or Boat Supervisor Marketing Specialist
04.19	TRANSPORTATION AND TRAVEL MARKETING	AIRLINE: Flight Attendant Flight Attendant Supervisor Customer Services Agent Reservations Sales Agent Reservations Agent Supervisor Marketing Representative CAR RENTAL: Car Rental AGent Car Rental Agent Supervisor Station Manager Marketing Specialist RETAIL TRAVEL AGENCY: Retail Travel Agent Retail Travel Counselor Marketing Specialist Manager or Owner/Manager
04.20	BUSINESS SERVICES MARKETING	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS
04.21	BUSINESS OWNERSHIP (ENTREPRENEURSHIP)	Department Store Owner Food Store Owner Hotel/Motel Owner Restaurant Owner Service Station Owner Variety Store Owner Wholesaling Owner

Figure 1. Continued

U.S.O.E. Instructional Program Codes		Occupations Represented in IDECC Curriculum Materials	U.S.O.E. Instructional Program Codes		Occupations Represented in IDECC Curriculum Materials
04.22	GENERAL MARKETING	WHOLESALING: Buyer Head Buyer Merchandiser Order Selecter Receiving/Shipping Supervisor Route Salesperson and/or Vending Machine Specialist Salesperson Sales Manager Warehouse Manager			
04.23	SALES AND MARKETING, OTHER	NOT CURRENTLY AVAILABLE IN IDECC CURRICULUM MATERIALS			

Figure 1. Continued

Identify representative occupations. For the U.S.O.E. Instructional Program Codes identified as needing expansion in terms of future occupational task surveys, the IDECC national office will determine a group of representative occupations by employment level within the instructional program code. IDECC has established that long-range plans will include further expansion of occupations within instructional program codes. Therefore, current emphasis should be placed on the development of representative occupations by employment levels not presently represented by IDECC curriculum materials based on U.S.O.E. Instructional Program Codes.

Criteria to be used in identifying representative occupations within a taxonomy, will include (1) job titles and roles solicited from industry, (2) current manpower figures and trends, (3) possible availability of funding for occupational task surveys, and (4) applicability of a career ladder (employment levels) concept which builds from basic entry through entrepreneurship occupational levels.

Cooperate and communicate mutually with other organizations. A concurrent consideration is the availability of existing career information and materials through distributive education professional organizations, state department of education, funded occupational and curriculum projects, university and other appropriate organizations.

Follow current federal guidelines. A final consideration is that long range occupational planning should reflect current federal guidelines. Specifically, the IDECC national office will review occupational expansion plans as they relate to current federal guidelines for vocational education programs.

These four planning considerations can provide a means for specifying the breadth and depth of occupations to be surveyed during the Task Survey Process.

Step 2: Develop Task Statements.

Definition of a task. One must understand the nature of task statements prior to constructing a list of tasks for an occupational task survey. Ammerman (1977a) defines a task as, "a meaningful unit of work activity, generally performed on the job by one worker within some limited period of time" (p. 21).

In addition, Ammerman (1977a) explaines that:

> Each task performed by workers in an occupation should be a logically differentiated segment of work activity. In content, a "task" is generally said to describe a job activity that is intermediate in specificity between a "function or responsibility" and a "procedural work step or action." It is a descrete unit of activity and represents a composite of methods, procedures, and techniques which commonly serve to accomplish one meaningful unit of work. (p. 21)

Structure of a task statement. A task statement is a declarative statement with three component parts; (1) an action verb, (2) an object of the action verb, and (3) a qualifying phrase when necessary. The task is a brief and clear statement which involves an employee interaction with objects, equipment, material, people, information, ideas, data, events, and conditions. The subject of the action verb should be understood by the employee to be "I." Further, a task as it is used in the Task Survey Process to determine appropriate job content for occupational training, must be specific and relate to one meaningful unit of work activity (Ammerman, 1977a, p. 22).

The following examples show the structure of the task statement.

Action Verb	+	Object of the Action Verb	+	Qualifying Phrase
Explain	+	business policy	+	to new vendors
Read	+	company newsletter		
Submit	+	suggestions	+	to management
Write	+	article	+	for company newsletter
Write	+	purchase order		

In addition, the task statement should conform with the following criteria established by Ammerman (1977a, p. 23). Each statement must:

1. Be stated in grammatically correct form with a present tense action verb, object of the action verb with the subject "I" omitted, but understood, When necessary, qualifying phrases may become a part of the sentence.
2. Reflect performance specificity, that is, what work is done.
3. Avoid activities that are too specific or trivial.
4. Avoid activities that are too general.
5. Avoid the use of vague or ambiguous words.
6. Be worded so that any of the task rating scales used makes sense when applied to it.
7. Avoid multiple action verbs.
8. Avoid multiple objects of the action verb.
9. Avoid joining more than one activity statement into a single task statement.
10. Be capable of standing alone.
11. Be stated using terminology appropriate to the occupation being studied.
12. Be job-oriented, reflecting what gets done by a worker.

Step 3: Construct Task Lists

Review written reference materials. The IDECC national office will review reference materials as the first step in the development of the initial listing of tasks and related equipment list. The objective of the reference reviewing process is to generate, in most cases, a hundred or more task statements per occupation.

Ammerman (1977a) indicates that useful reference materials may be found in:

1. Published job materials, handbooks, and manuals.
2. Job analysis studies conducted by the U.S. Employment Service, its occupational field centers, and state employment services.
3. Employer training programs, including those conducted by the armed forces technical schools and by other federal agencies.
4. Task inventories previously developed by others. (Vocational-Technical Consortium of States, National Center for Research in Vocational Education Publication: Directory of Task Inventories, Crawford Study, etc.)
5. Curriculum guides prepared by state vocational curriculum laboratories, public school systems conducting occupational education, and private businesses and trade schools.
6. Empirical studies to establish the content validity of employment tests.
7. Special project yielding occupational descriptions, such as graduate dissertations in collegiate schools of industrial psychology, industrial management, industrial engineering, industrial arts or vocational education, business, applied arts, and various specialized occupational disciplines. Many of these may be located through the Dissertation Abstracts International: Section A (The Humanities and Social Sciences), a monthly publication of Xerox University Microfilms, Ann Arbor, MI 48106. (p. 46)

Construct initial listing of tasks. As the review of reference materials is completed, the IDECC curriculum coordinator should have generated an initial listing of tasks and related equipment list. There is no ideal length for a task survey; however, a single occupation within an employment level generally consists of from 100 to 300 task statements. The major consideration is not the number of tasks, but the quality and comprehensiveness of the statements. This will assure that effective curriculum decisions are made based on the information yielded during the task survey.

During Step 1: Determining Occupational Scope, the IDECC national office identified a group of representative occupations by employment levels within a U.S.O.E. Instructional Program Code. Therefore, an initial listing of tasks will be developed for each occupation representing a particular employment level with a U.S.O.E. Instructional Program Code. These individual occupational listing of tasks for each employment level will assure that work performance which may shift between the different levels within an instructional program code is adequately covered.

The occupational task lists are now assigned to members of an advisory committee for review. The advisory committee should be selected based on a committee member's training, experience, and knowledge of the occupations being studied within an instructional program code. For example, a department store display manager could be selected to be on the advisory committee to review the listings of tasks for the occupations of Display Manager, Assistant Display Manager, and Display Helper. The remaining advisory committee members should be assigned in a similar manner.

The directions for reviewing the task lists are presented in Figure 2. The end result of the reviewing process should be an updated and expanded listing of tasks and related equipment *per occupation* by persons directly involved with the occupations being studied. It should be noted that IDECC *recommends* that an advisory committee be used in the development of the task lists.

Upon completing the initial advisory committee review of tasks and equipment, the IDECC national office will edit each of the occupational task and equipment lists within an instructional program code based on the criteria present in Step 2: Develop Task Statement. (Note: the advisory committee should not be asked to follow the Step 2 criteria concerning how to develop task statements.) The end product will be a separate comprehensive listing of tasks and equipment which covers each occupation being studied within the instruction program code. In addition, each task statement should now be stated properly, based on the guidelines presented in Step 2.

The IDECC national office will then group related tasks within appropriate duty or functional categories to help organize each comprehensive task list. Each comprehensive listing of grouped tasks will then be sent to each of the advisory committee members for a final review with an appropriate explanation of the nature of the new task lists.

A final listing of tasks will be developed based on the comments of the advisory committee. This process will yield a comprehensive listing of tasks for each occupation representing an employment level within an instructional program code. The task listings will better provide task information concerning the tasks relevant to each occupation being studied.

DIRECTIONS FOR REVIEWING TASK LISTS

An initial list of task statements has been written for each occupation within an instructional program code for review by occupational consultants. Because of your expertise and experiences in this area, we have asked you to serve as a consultant to refine and revise the task listings prior to their use. The purpose of this review is to add missing task statements, delete obviously irrelevant ones, break down task statements that are too broad, and improve the wordings of vague or lengthly task statements. (Please do not prejudge the importance of each task.) After your evaluation, the revised list will be administered to employees and supervisors in the occupational area to verify the tasks that they actually perform.

Please consider the following questions as you review these lists prior to our consultant meeting. You may need to obtain information from other employees during the review of the task lists.

QUESTIONS TO CONSIDER

1. To your knowledge, is the task performed by employees in the occupation? If not, please indicate in the comment section.
2. Could the task be broken up into two or more statements? If so, write the new task statements in the comment section.
3. What statements should be added to complete the list of tasks? Write additional task statements at the end of the list.
4. Is the task statement clear? If not, make suggestions in the comment section.
5. In the final review, is the task list comprehensive? Is the list representative of all tasks performed by the employee?
6. Please add any additional comments in the comment section of the task list.

Figure 2: An example of instructions for reviewing initial task lists.

It will also determine task relevancy across the instructional program code and a separate comprehensive listing of equipment.

The listing of tasks is now ready to be pilot tested. Arrangements are now made with a few representative employees from the occupation being studied to read the task statements. The reviewers are to comment on the clarity and understandability of each task statement. After appropriate revisions are made, the development of the listing of tasks is completed for the upcoming Task Survey.

Step 4: Determine Needed Task Information

To make decisions concerning job relevancy and appropriateness of training content, three types of task information are required:

criticalness, comprehensiveness, and timeliness. In order to make this decision, the task performance content of the occupations being studied must be determined by obtaining three types of task data. They are:

1. EXTENT THAT TASK IS PART OF THE JOB (Asked of each employee being surveyed)
2. DESIRED TASK OCCURRENCE (Asked of immediate supervisor for the type of employee being surveyed)
3. LEARNING LOCATION (Asked of immediate supervisor for the type of employee being studied)

Determine extent that task is part of the job. Job relevancy data are provided by the question, "How significant is each task as a part of your job?" This question is answered by each employee in the occupation being surveyed by completing a rating scale for each task statement. For each task statement, the employee chooses a value between 0 and 7 according to the following rating scale:

0 = Definitely not a part of my job position, does not apply, or is not true for this job.
1 = Under unusual circumstances may be a minor part of my job.
2
3
4 = A substantial part of my job.
5
6
7 = A most significant part of my job.

The ratings of "2" or "3" represent intermediate levels between "MINOR" and "SUBSTANTIAL" parts of the job. Similarly, the ratings of "5" and "6" represent intermediate levels between "SUBSTANTIAL" and "MOST SIGNIFICANT" parts of the job. Thus, the scale represents a series of increasingly higher levels of the extent to which a task is considered part of the job (Ammerman, 1977b, p. 34). Appendix B gives the complete instructions for answering this question.

Determine desired task occurrence. Job relevance data are provided by the question, "Which of the listed tasks should be performed in your operation by employees of the type being surveyed?" This question is answered by supervisors of that type of employee. Therefore, for each task statement, the supervisors place an "X" or check mark in the column to the right of the task statement to indicate which tasks the employee should be doing as part of his/her job, even if done only once. The task statements which do not reflect part of the job are left blank (Ammerman, 1977b, p. 32).

Determine learning location. Job relevancy data are provided by the question, "Where should the main effort be made to learn each of the tasks of the job?" This question is answered by having the supervisors complete a learning location rating scale. For each task statement, the supervisors choose an answer from the following rating scale:

P = PRIOR to enrollment in a formal job training program (such as in grade school, at home, or in other instructional programs).

T = In a formal TRAINING program or school, before regular employment in the job.

S = On SITE (such as by job experience after employment, on-the-job training, self-training, or in local training courses after employment in the occupation).

E = Through prior employment EXPERIENCE in a related or lower entry occupation (but not experience in this position).

O = OTHER. (Please write your judgment of the proper learning location on the reverse side of the answer page, indicating the item number).

N = There is NOTHING of any real substance that new employees would need to learn about the activity.

(Ammerman & Essex, p. 18)

Appendix C gives the complete instructions for answering the desired task occurrence, and learning location questions.

Step 5: Determine Needed Respondent Information.

Determine background information. Background information sheets need to be developed for each type of employee and supervisor in the occupations being surveyed. This information will identify the general characteristics of persons who answer the survey questionnaire. An effort should be made to minimize the amount of background information sought. Generally, the information requested includes job title, type of industry, and length of work experience in the occupation. The respondents to the background information questions should be able to check off an appropriate answer, thereby minimizing the response time.

Caution is needed regarding the collection of personal information. If information is sought concerning sex, age, marital status, educational background, and physical handicaps, then such questions should be reviewed by a human subjects protection committee.

Figure 3 is an example of a Background Information Sheet for an employee. Figure 4 is an example of a Background Information Sheet for a supervisor of that type of employee.

Determine list of equipment. In Step 3: Constructing Task Lists, the IDECC curriculum coordinator should have developed a comprehensive listing of equipment for the occupations being surveyed. Employees should be asked to check the equipment which they use in their present job. Supervisors should be asked to check the equipment used by the employees being surveyed. The listing of equipment is separate from the listing of task statements. It is located in the task booklet after the

(Use this sheet if you are a Stockperson, not a supervisor of Stockperson)

INSTRUCTIONS: Please check the box opposite the one item in each section that most appropriately describes your experience.

WHAT IS YOUR JOB POSITION? (check the one that is most descriptive, regardless of actual job title used in your business)

☐ Stockperson ☐ Other (please write in): _____

_____

_____HOW MANY EMPLOYEES WORK IN THE LOCATION WHERE YOU ARE? (Enter Number)

SPECIFY LOCATION, SUCH AS DEPARTMENT OR DIVISION (Please writen in) _____

_____

_____ HOW MANY YEARS HAVE YOU WORKED AT YOUR PRESENT JOB? (Enter number)

_____ HOW MANY YEARS HAVE YOU WORKED IN DEPARTMENT STORE RETAILING? (Enter number)

WHERE DID YOU RECEIVE YOUR TRAINING TO QUALIFY AS A STOCKPERSON? (Check the one most appropriate)

☐ Senior High School (secondary)
☐ Technical Institute or Area Vocational-Technical
☐ Community or Junior College
☐ Two-year Branch College
☐ Equipment Manufacturer's Training Program
☐ On the Job (Self Learned)
☐ Previous Work Experience in Other Types of Jobs
☐ Public Vocational School (secondary)
☐ Community Manpower Development Program
☐ Private Business, Trade, or Technical School or College
☐ Senior College or University
☐ Employer-Sponsored Training Program
☐ Correspondence Courses
☐ Other (please write in): _____

_____

Figure 3: An example of a background information sheet for employees.

listing of tasks. The actual format of the employee and supervisor of that type of employee task booklets will be described, in detail, in the next step. Figure 5 is a sample of a listing of equipment.

Determine reaction to survey. The respondent's reaction to the task survey is assessed by developing a Comments and Suggestions sheet. This sheet should minimize the information sought by asking checklist or circle-response type questions. Figure 6 is an example of a Comments and Suggestions Sheet.

BACKGROUND INFORMATION

(Use this sheet if you are a SUPERVISOR of Stockpersons)

INSTRUCTIONS: Please check the box opposite the one item in each section that most appropriately describes your experience.

WHAT IS YOUR PRESENT JOB POSITION: (check the one that is most descriptive, regardless of actual job title used in your business)

- ☐ Department Manager
- ☐ Area Head of Stock
- ☐ Store Manager
- ☐ Other (please write in): _____

_____ HOW MANY EMPLOYEES WORK IN YOUR LOCATION? (Enter number)
SPECIFY LOCATION SUCH AS THE SPECIFIC DEPARTMENT OR DIVISION
(Please write in) _____

_____ HOW MANY YEARS OF EXPERIENCE DO YOU HAVE DIRECTLY SUPERVISING THE WORK OF STOCKPERSON?

_____ HOW MANY GRADUATES OF VOCATIONAL TRAINING PROGRAMS DID YOUR IMMEDIATE ORGANIZATION HIRE LAST YEAR FOR THIS OCCUPATION? (Enter number)

Figure 4: An example of a background information sheet for supervisors.

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

O+: never performed, but might
Y-: much less often than once per year
1Y: one or more times per year
1M: one or more times per month
1W: one or more times per week
1D: once per day, on the average
D+: several times each day

	CIRCLE ONE						
1. Adding Machine	O+	Y-	1Y	1M	1W	1D	D+
2. Bags and boxes for merchandise	O+	Y-	1Y	1M	1W	1D	D+
3. Belt conveyer system	O+	Y-	1Y	1M	1W	1D	D+
4. Calculator	O+	Y-	1Y	1M	1W	1D	D+
5. Carpenter equipment	O+	Y-	1Y	1M	1W	1D	D+
6. Cash register (Non-computerized)	O+	Y-	1Y	1M	1W	1D	D+
7. Charge plate producing machine	O+	Y-	1Y	1M	1W	1D	D+
8. Computers	O+	Y-	1Y	1M	1W	1D	D+
9. Computer reports	O+	Y-	1Y	1M	1W	1D	D+
10. Crates and cartons	O+	Y-	1Y	1M	1W	1D	D+
11. Credit application forms	O+	Y-	1Y	1M	1W	1D	D+
12. Credit authorization computer	O+	Y-	1Y	1M	1W	1D	D+
13. Credit bureau terminal	O+	Y-	1Y	1M	1W	1D	D+
14. Credit card stamper	O+	Y-	1Y	1M	1W	1D	D+
15. Credit explanation folder (pamphlets)	O+	Y-	1Y	1M	1W	1D	D+
16. Customer credit books	O+	Y-	1Y	1M	1W	1D	D+
17. Delivery trucks (e.g. 2-wheel dolly)	O+	Y-	1Y	1M	1W	1D	D+
18. Department identification tags	O+	Y-	1Y	1M	1W	1D	D+
19. Display backdrops	O+	Y-	1Y	1M	1W	1D	D+
20. Display racks	O+	Y-	1Y	1M	1W	1D	D+
21. Drawing board and equipment	O+	Y-	1Y	1M	1W	1D	D+

Figure 5: An example of a comprehensive listing of equipment and materials for General Merchandise Retailing: Department Store.

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

- O+: never performed, but might
- Y-: much less often than once per year
- 1Y: one or more times per year
- 1M: one or more times per month
- 1W: one or more times per week
- 1D: once per day, on the average
- D+: several times each day

	CIRCLE ONE						
22. Duplicating machine	O+	Y-	1Y	1M	1W	1D	D+
23. Filing equipment	O+	Y-	1Y	1M	1W	1D	D+
24. Freight elevator	O+	Y-	1Y	1M	1W	1D	D+
25. Garment pressing equipment	O+	Y-	1Y	1M	1W	1D	D+
26. Mannequins	O+	Y-	1Y	1M	1W	1D	D+
27. Merchandise order forms	O+	Y-	1Y	1M	1W	1D	D+
28. Merchandise traffic book	O+	Y-	1Y	1M	1W	1D	D+
29. Microfilming equipment	O+	Y-	1Y	1M	1W	1D	D+
30. Paints and brushes	O+	Y-	1Y	1M	1W	1D	D+
31. Paper and board (of various weights, display)	O+	Y-	1Y	1M	1W	1D	D+
32. Personnel planning book	O+	Y-	1Y	1M	1W	1D	D+
33. Photography equipment	O+	Y-	1Y	1M	1W	1D	D+
34. Pneumatic tubes	O+	Y-	1Y	1M	1W	1D	D+
35. Point-of-sale terminal (computerized cash register)	O+	Y-	1Y	1M	1W	1D	D+
36. Price change books	O+	Y-	1Y	1M	1W	1D	D+
37. Price change clippers	O+	Y-	1Y	1M	1W	1D	D+
38. Price lists	O+	Y-	1Y	1M	1W	1D	D+
39. Procedures manual	O+	Y-	1Y	1M	1W	1D	D+
40. Sales check book	O+	Y-	1Y	1M	1W	1D	D+
41. Saws	O+	Y-	1Y	1M	1W	1D	D+

Figure 5. Continued

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

O+: never performed, but might
Y-: much less often than once per year
1Y: one or more times per year
1M: one or more times per month
1W: one or more times per week
1D: once per day, on the average
D+: several times each day

	CIRCLE ONE						
42. Show cases	O+	Y-	1Y	1M	1W	1D	D+
43. Signs	O+	Y-	1Y	1M	1W	1D	D+
44. Sign holders	O+	Y-	1Y	1M	1W	1D	D+
45. Small floor trucks	O+	Y-	1Y	1M	1W	1D	D+
46. Store operations and procedures manual	O+	Y-	1Y	1M	1W	1D	D+
47. Tagging or marking machines	O+	Y-	1Y	1M	1W	1D	D+
48. Tear sheet book	O+	Y-	1Y	1M	1W	1D	D+
49. Telephone	O+	Y-	1Y	1M	1W	1D	D+
50. Time clocks	O+	Y-	1Y	1M	1W	1D	D+
51. Typewriter	O+	Y-	1Y	1M	1W	1D	D+
52. Video equipment	O+	Y-	1Y	1M	1W	1D	D+
53. Want slips	O+	Y-	1Y	1M	1W	1D	D+
54. Weighing machines and scales	O+	Y-	1Y	1M	1W	1D	D+

What are some other materials and equipment that you use in your work?

Figure 5. Continued

COMMENTS AND SUGGESTIONS

THANK YOU FOR YOUR COOPERATION - NOW WE WOULD LIKE TO GET YOUR REACTION:

This page provides an opportunity for you to give us your comments and suggestions. Your judgment and recommendations will be important information for our evaluation of this survey of job performance activities. Feel free to comment at any point.

Please read each of the seven statements below. Circle the symbol on the right which best describes your feelings about each statement. These symbols are defined as follows:

SA = Strongly Agree

A = Agree

U = Undecided

D = Disagree

SD = Strongly Disagree

1. The description of the occupation being surveyed seemed to include most of my present job activities. SA A U D SD
2. The general form of the questionnaire seemed reasonably simple and easy to complete. SA A U D SD
3. I feel certain that my ratings indicate accurately what I do on my job. SA A U D SD
4. I found it easy to think of my work in terms of the tasks listed in the questionnaire. SA A U D SD
5. The instructions for answering the questions about each task were clear and understandable. SA A U D SD
6. The statements of the work tasks were clear and accurate, at least for the ones that are part of my job. SA A U D SD
7. This survey seems to be a good way to describe the activities performed in this occupation. SA A U D SD

Please recommend any improvements or corrections for this survey questionnaire in the space below.

Figure 6: An example of a comment and suggestion sheet for an employee task questionnaire.

Step 6: Design Task Survey Questionnaires.

The cover page, introduction, instructions, background information sheets, comprehensive listing of equipment and comments and suggestions sheet developed for each occupation should be compiled into two Task Inventory Questionnaires for the two groups of respondents (i.e., employee and supervisor).

Compile booklet for employee. The Task Inventory Questionnaire for the employee being surveyed should consist of the following sections:

1. Cover Page for the employee
2. Introduction
3. Background Information Sheet for the employee
4. Instructions to the employee for rating task statements
5. Listing of task statements with appropriate rating scales
6. Listing of Equipment
7. Comments and Suggestions Sheet

An example of this format is presented in Appendix B.

Compile booklet for supervisor. Information similar to that presented above should be compiled; however, this information should be for the supervisor of the type of employee being surveyed. It would consist of the following:

1. Cover Page for the supervisor of the employee
2. Introduction
3. Background Information Sheet for supervisor
4. Instructions for the supervisor to rate task statements
5. Listing of task statements with appropriate rating scales

6. Listing of Equipment

7. Comments and Suggestions Sheet

An example of this format is presented in Appendix C.

Determine number of respondents. Plans should be made concerning the number of persons to complete the two task inventory surveys. Ammerman (1977a) recommends, "If the job types and the workers in each are known with reasonable certainty, useable returns from at least 30 employees and 30 supervisors for each likely job type are needed" (p. 39). In addition, IDECC recommends that a minimum of five states be included as task inventory sites with proper consideration given to geographical representation as well as business and community sizes.

The individuals making direct contact with the employee and supervisor being surveyed are given specific directions concerning the type of respondents to complete a task booklet. Figure 7 is an example of the directions for identifying potential respondents to complete a task inventory questionnaire.

Step 7: Administer Task Survey Questionnaires

This step is vital to the successful completion of the Task Survey process and may prove to be difficult to accomplish without proper planning, and assistance of state and local personnel. Extra precaution needs to be taken to assure that proper local administration of the task survey questionnaires is achieved.

Identify state contact person. The IDECC national office will identify a state contact person from each member state. IDECC recommends that the state IDECC representative or another designated person serve as the contact person for task surveys in each respective state. This

DIRECTIONS FOR IDENTIFYING RESPONDENTS TO A TASK INVENTORY QUESTIONNAIRE

1. Employees selected to answer the Task Inventory Questionnaire should be employed full-time in the occupation presented on the cover of the task questionnaire. In some cases, additional occupational titles acceptable for the survey may be listed on the background information page of the questionnaire.

   Example of Occupational Title on Cover Page:

   (Booklet for Salesperson)

   Employees must have at least two years work experience in the occupation being surveyed. Avoid surveying employees with less than two years of job experience.

2. Supervisors selected to answer the Task Inventory Questionnaire should be those persons who organizationally are in a position immediately above the type of employee described in the employee booklet. They need not be the immediate supervisor of the particular employee selected, but should normally supervise the work of that type of employee. It is preferred that the supervisor have at least two years of recent experience supervising a number of employees of the type being surveyed.

   In some cases, possible occupational titles of supervisors for the type of employee being surveyed are listed on the background information page of the booklet for supervisor.

   Example of Occupational Title on Cover Page:

   (Booklet for Supervisor of Salesperson)

Figure 7: An example of directions for identifying respondents to to complete a task inventory questionnaire.

person will, in turn, identify local teachers who will administer the task surveys. Teacher educators may be able to assist in the administration of task surveys. Teacher education participation in assisting with the administration of task surveys is strongly encouraged.

After identifying the IDECC state contact person for task surveys, the IDECC national office will determine the number of task booklet sets that each state can administer. A recommended range is from 20 to 30 sets of the task booklets per state. The number of booklets may vary according to individual state circumstances as well as the number of occupations being surveyed. (NOTE: A set of task booklets consists of one employee and one supervisor booklet for one occupation. A teacher will be asked to locally administer a set of task booklets for an occupation.) The state commitment of task booklet sets should then be

STATE	BOOKLET SETS	OCCUPATIONS TO BE SURVEYED BY STATE									
		STOCKPERSON (21)	SALESPERSON (01)	PROFESSIONAL SALESPERSON (02)	DEPARTMENT MANAGER (25)	ASSISTANT BUYER (62)	BUYER (14)	ADVERTISING MANAGER (69)	DISPLAY HELPER (66)	DISPLAY ASSISTANT (67)	DISPLAY MANAGER (68)
Alabama	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓					
California	30						✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓					
Florida	25						✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mississippi	15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓					
New Hampshire	20						✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓					
Oklahoma	25						✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Figure 8: An example of the Occupational Survey Chart.

listed on the Occupation Survey Chart. An example of this chart is presented in Figure 8.

The Occupational Survey Chart should be an alphabetical list of each participating state and the number of booklet sets each state can administer by occupation. The top vertical portion of the chart provides space to list the occupations being surveyed.

Upon obtaining the number of booklet sets to be administered by each state, the IDECC national office will determine the occupational booklet sets assigned to each participating state. This will be accomplished by starting with the first state listed and checking the space beside each occupational set once until the state's commitment has been reached. The assignment procedure will be repeated for the next state listed on the Occupational Survey Chart by checking the space beside the next occupational booklet set at the point the previous state assignment ended. The remaining state booklet sets are assigned in a similar manner (See Figure 8).

Code task booklets. Each task booklet needs to be coded. The code will assure proper records management of 1) booklets assigned to states, 2) completed and returned booklets, and 3) reassignment of lost booklets.

The coding may be accomplished by developing a Master Coding Sheet for each occupation to be surveyed. This sheet consists of Employee and Supervisor sections with the appropriate number of columns for the assignment codes to be used in the occupational survey.

The IDECC national office will use a five digit code. The code consists of:

MASTER CODING SHEET FOR

ADVERTISING MANAGER (69)

Employee Booklet Codes			Supervisor Booklet Codes		
69101	69126	69151	69201	69226	69251
69102	69127	69152	69202	69227	69252
69103	69128	69153	69203	69228	69253
69104	69129	69154	69204	69229	69254
69105	69130	69155	69205	69230	69255
69106	69131	69156	69206	69231	69256
69107	69132	69157	69207	69232	69257
69108	69133	69158	69208	69233	69258
69109	69134	69159	69209	69234	69259
69110	69135	69160	69210	69235	69260
69111	69136	69161	69211	69236	69261
69112	69137	69162	69212	69237	69262
69113	69138	69163	69213	69238	69263
69114	69139	69164	69214	69239	69264
69115	69140	69165	69215	69240	69265
69116	69141	69166	69216	69241	69266
69117	69142	69167	69217	69242	69267
69118	69143	69168	69218	69243	69268
69119	69144	69169	69219	69244	69269
69120	69145	69170	69220	69245	69270
69121	69146	69171	69221	69246	69271
69122	69147	69172	69222	69247	69272
69123	69148	69173	69223	69248	69273
69124	69149	69174	69224	69249	69274
69125	69150	69175	69225	69250	69275

Figure 9: An example of the master coding Sheet for Advertising Manager (69).

Digit 1-2: Occupation

Digit 3 : Respondent
1 = Employee
2 = Supervisor

Digit 4-5: Number of booklet

An example of this coding is 01230. This code represents Occupation 01 (Salesperson) - Supervisor Booklet - number 30.

Figure 9 presents an example of a Master Coding Sheet for an Advertising Manager (69) with 75 employee and supervisor booklet codes.

Assign coded booklet sets. The IDECC national office will complete the task booklet assignment process by cross-referencing the information on the Occupation Survey Chart and Master Coding Sheet. This is accomplished by recording the appropriate booklet codes on the Master State Assignment Sheet.

The Master State Assignment Sheet consists of the following information columns:

1. Task Booklet Codes
   a. Employee
   b. Supervisor
2. Teacher's Name
3. School Address
4. City, Zip
5. Telephone number with area code

Information for items 2 through 5 is to be completed by the state contact person at the time the teachers are assigned to administer the task booklets locally. The curriculum planner from the IDECC national office records the information for item 1 on the form during the cross-referencing process. The cross-referencing is accomplished by starting with the first state listed on the Occupational Survey Chart and by determining from left to right the number of booklet sets (each booklet set is represented by a check mark on the Occupational Survey Chart) assigned to that state for each occupation. Once the number of booklet sets is determined, the curriculum planner should refer to the Master Coding Sheet, and assign, in order, the booklet code for one worker and one supervisor booklet (i.e., one set of coded booklets). This process

is repeated until all the necessary booklet sets have been assigned for that state (See Figure 10). Using the blank State Assignment Sheet, the cross-referencing process would be repeated for each state until all coded booklet sets are assigned and recorded on Master State Assignment Sheets.

The completed Master State Assignment Sheets appear as in Figure 10. This sheet serves as a check-in device to assure that the proper task booklets are mailed to each state contact person as well as a follow-up guide for non-returned task questionnaires. (NOTE: The state contact person will make a copy of the Master State Assignment Sheets as a record of the task booklet assignments.)

Mail task booklets. The IDECC national office will prepare a mailing for each state participating in the task survey. The mailing will include:

1. Master State Assignment Sheet with
   a. "Distributive Education State Supervisor/Teacher Educator Instructions for Assigning and Distributing Task Inventory Questionnaires" (See Figure 11).
   b. A copy of "Information and Guidance to Help in the Local Administration of Task Inventory Questionnaires" (See Figure 12).
   c. A copy of "Directions for Identifying Respondents to Task Inventory Questionnaires" (See Figure 7).
2. Task Booklet Sets with
   a. "Information and Guidance to Help in the Local Administration of Task Inventory Questionnaires" (See Figure 12).
   b. "Directions for Identifying Respondents to a Task Inventory Questionnaire" (See Figure 7).
   c. Stamped self-addressed envelope.

This mailing is easily put together by first compiling the necessary information from number 1 for the contact person, and, second, by systematically compiling the properly coded task booklets into sets as listed on

MASTER STATE ASSIGNMENT SHEET

Alabama
State

Gene Callahan
Person in Charge of Task Analysis

Please be Sure Name is Assigned to Correct Number

Code Number for Task Booklet Sets		Teacher's Name	School Address	City Zip	Phone No. Include Area Code
01101	01201	Susan James	Kent H.S. 207 Beech	Birmingham 40420	(501) 471-8210
01102	01202	Jason Roberts	North H.S. 5112 Elm	Birmingham 40421	(501) 287-3451
02101	02201				
02102	02202				
03101	03201				
03102	03202				
04101	04201				
04102	04202				
05101	05201				
05102	05202				
06101	06201				
06102	06202				
07101	07201				

Figure 10: An example of Master State Assignment Sheet as it would be received by the Alabama state contact person.

DISTRIBUTIVE EDUCATION STATE SUPERVISOR/TEACHER EDUCATOR INSTRUCTIONS FOR ASSIGNING AND DISTRIBUTING TASK INVENTORY QUESTIONNAIRES

If at all possible, all teacher-coordinators and collegiate students should be gathered together at one central location for a brief meeting to distribute the Task Inventory Questionnaires and review the administration instructions. This meeting should be held at the time the survey questionnaires are to be assigned and distributed.

1. A Master State Assignment Sheet has been provided to insure proper records concerning the distribution of the Task Inventory Questionnaires. Complete the assignment sheet by filling in Teacher's (Student's) Name, School Address, City, Zip Code, and Telephone Number of the teacher or collegiate student who will receive a set of task surveys.

2. The Task Inventory Questionnaire should be distributed based on the completed assignment sheet. This is the proper time to determine if the occupation on the set of booklets is appropriate for local survey situations. (e.g. A teacher receives a set of booklets for Assistant Display Manager; however, the teacher is located in a small rural community with a small department store. The teacher feels that this assignment is inappropriate and requests another set of booklets for a more suitable occupation.) IT IS EXTREMELY IMPORTANT THAT THE ASSIGNED SET OF BOOKLETS REPRESENT AN APPROPRIATE OCCUPATION FOR LOCAL SURVEY SITUATIONS.

   Also, it is very important that the task surveys received by the teachers or collegiate students are double checked against the assignment sheet. Specifically, please check the task booklet numbers against the assignment sheet to insure that proper distribution has been achieved.

3. Written instructions have been attached to each set of survey booklets. It is important to review each of the instructions with the teachers or collegiate students. The instructions entitled "INFORMATION AND GUIDANCE TO HELP IN THE LOCAL ADMINISTRATION OF TASK INVENTORY QUESTIONNAIRES" and "DIRECTIONS FOR IDENTIFYING RESPONDENTS TO A TASK INVENTORY QUESTIONNAIRE," have been attached to your instructions for review prior to the teacher or collegiate student meeting. The information should provide the necessary answers concerning the survey process; however, if you have additional questions or concerns, feel free to contact the IDECC National Office.

   PLEASE EMPHASIZE THE IMPORTANCE OF ACCURACY AND COMPLETENESS IN ADMINISTRATION OF THE TASK INVENTORY QUESTIONNAIRES.

4. After the teacher or collegiate student meeting, please return the completed Master State Assignment Sheet in the self-addressed stamped white envelope which has been provided. You should make a copy of the assignment sheet prior to mailing as insurance against loss in the mail.

5. WE THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY.

Figure 11: An example of directions to the state contact person for assigning and distributing the task inventory questionnaires.

the Master State Assignment Sheets with accompanying directions and instructions listed in number 2.

Figure 11 presents the directions to the state contact person for assigning and distributing the task booklets to teachers for local administration. Similarly, Figure 7 and 12 present detailed instructions to the teachers for locally administering the task inventory questionnaire. The IDECC curriculum planner will have advance direct contact with the state

INFORMATION AND GUIDANCE TO HELP IN THE LOCAL ADMINISTRATION OF TASK INVENTORY QUESTIONNAIRES FOR GENERAL MERCHANDISE RETAILING: DEPARTMENT STORE OCCUPATIONS

1. Identifying Employees/Supervisors to Answer the Questionnaire
Persons selected to answer the Task Inventory Questionnaire should be selected based on the attached sheet entitled, "DIRECTIONS FOR IDENTIFYING RESPONDENTS TO A TASK INVENTORY QUESTIONNAIRE" (See Figure 7).

2. Type of Locations to be Surveyed
The employees/supervisors selected to answer the questionnaires must be employed in the area of Department Store.

3. Purpose of the Task Inventory Questionnaire
Each questionnaire respondent, as well as each store offical contacted, should be informed of the purpose of the Task Inventory Questionnaire. The following comments are provided for your possible use in telling employers of the purpose of this data-collection effort:

> The purpose of this questionnaire is to identify what job tasks are relevant to the occupation being surveyed. This information will be used in a curriculum project to identify the extent to which each task is relevant to that occupation, serving as one basis for assuring that training is directed at the more relevant tasks.
>
> A composite of two types of questionnaires for that occupation will be used as the basis for determining which task skills are now performed and expected of employees. This composite will represent a cross-section from various geographical locations and businesses.
>
> The problem is not a simple one on which to obtain concensus. Each occupation has its own set of requirements and assignments. The questionnaires will be analyzed to identify significant tasks of each occupation.

4. Time-Saving Features
There are several time-saving features built into this questionnaire. It may be useful to tell participating employers of these, to assure them that we were aware of the value of their time.

a. Questions on background information are kept to a minimum absolutely necessary to this survey.

b. By use of prepared listings of tasks for an occupation, the employee is only asked to recognize each task, and not have to try and recall each work activity. Recognition is much faster and more complete than is recall.

c. Answers to each task statement need to be given simply by circling a number or by checking an item.

5. Assurance of Confidentiality
There should be no penalty for giving an honest answer, or for refusing to answer a particular item (or even the whole questionnaire, if that should occur). In no way should the respondent's higher management levels be informed that a person "failed to cooperate." Even the nature of the individual answers should be kept confidential; in no way should they serve to embarrass or harass the respondents.

6. Assurance of Voluntary Participation
Each employee always has the right to refuse to answer a particular item on the questionnaire. Please be sure to inform each one of this option, but do so in a way that does not encourage them to omit answers very often. Discretely tell them of their right, but stress the need for their experienced judgments.

7. Review of Completed Questionnaires
There is a need for you to check that the questions have in fact been answered. The following guidelines are suggested for doing this review and for responding to discrepancies:

a. Scan each answer section, including the Background Information page, to determine whether answers were generally given to all tasks listed.

b. If it appears that the employee/supervisor chose not to provide a reasonably complete set of answers, either contact that person again and try to get continued effort on it, or find a person in a comparable type of business to complete another questionnaire.

c. If the answers are complete but do not make sense, accept them without comments. Note your evaluation on the outside of the return envelope. DO NOT CONVEY THIS INFORMATION TO THE EMPLOYER. Then, contact a person in some comparable type of occupation to obtain a complete and meaningful set of responses.

Figure 12: An example of directions for local administration.

If additional questionnaires are needed contact the IDECC National Office immediately by returning the original booklets in the self-addressed stamped envelope which has been provided with a note requesting additional booklets.

8. Extra Questionnaires
If additional copies of the Task Inventory Questionnaires are needed contact The IDECC National Office at the following address:

IDECC National Office
The Ohio State University
1885 Neil Avenue
119 Townshend Hall
Columbus, Ohio 43210

Telephone: (614) 422-4202

9. Returning Completed Questionnaires
As the completed worker and supervisor questionnaires are returned to you, place the set of questionnaires in the self-addressed, stamped envelope and seal. Mail the envelope either to The IDECC National Office or your state contact person based on the mailing instructions you have been provided.

You have then completed your responsibilities in collecting the task data for the occupation being surveyed.

10. Feedback on Problems Encountered
Please note any significant problems encountered in administering the questionnaires and inform us by letter after your work is done. This feedback will help us to assess the need for procedural changes to yield effective and efficient data-gathering processes in the future.

11. Showing Appreciation to Respondents
Each local teacher who administrated task questionnaires may want to show appreciation to employers/employees who cooperated in this study. Some excellent procedures that have been used in the past have been to send to each person a commendatory letter or a printed certificate of appreciation for participating in the study. The IDECC National Office will supply certificates to you to present to the employees/supervisors upon request.

12. WE THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY.

Figure 12. Continued

contact persons to assure understanding of the various state and teacher responsibilities during the data collection process.

Step 8: Process Task Survey Data

Prepare questionnaire responses for data processing. When 30 useable employee and 30 useable supervisor booklets for an occupation are returned, the curriculum planner is ready to start processing the returned task inventory questionnaires. It is necessary to first review the completed booklets for completeness and accuracy. Ammerman (1977b) lists the following possible failures of the respondents to follow questionnaire directions:

1. Highly inconsistent and incomplete responses.

2. Supervisor apparently rating his own job as supervisor, not the performance of workers in the occupation.

3. Inappropriate respondent, as when background sheet note an alternate job title and this is substantiated by the overall pattern of task responses. (Job title should not be the sole basis for rejection, since many inconsistencies exist for titles in practice.)

4. Task responses within a questionnaire fail to show item discrimination, such as when every task is checked as performed or all are rated by an employee at the same scale level on the significance Question.

5. Use of a great many multiple responses by supervisors per task on the learning location question (multiple responses are not useable by the computer routine).

6. Identical response patterns from all workers in one participating shop or office.

7. No tasks rated after the first few pages of a booklet, indicating the respondent chose not to complete the questionnaire. (p. 62)

After the booklets have been scanned, they should be ready to be keypunched. The keypunching can be done directly from a task booklet. A task booklet should be keypunched in I-format as follows:

1. The IDECC number (task booklet code number) is keypunched in the first five columns starting in the left field on the card.

2. The appropriate two letter state abbreviation is typed in the 6 and 7 column.

3. The question number is typed in the 8 and 9 column.

4. The sequence card number is typed in column 10.

5. The remaining columns are used to record responses.

Mead, Essex and Ammerman (1977), cautions that:

> As many cards as necessary are used to accommodate ratings on all tasks for one subject, but each card must contain the same ID and question number and must be numbered sequentially in the card number field. There may be unused columns in the task data field for a subject's last card for a particular question (i.e., the total number of tasks is not evenly dividible by the number of tasks per card). These unused columns should be left blank. Data cards must be in the same format for all questions. (p. 13)

The valid response codes for each question are as follow:

Question 1: Extent Task is Part of Position (Workers)

0 = 0: not part of position
1 = 1: minor part
2 = 2:
3 = 3:
4 = 4: a substantial part
5 = 5:
6 = 6:
7 = 7: a most significant part

Question 2: Desired Task Occurrence (Supervisors)

1 = checked (positive)
2 = not checked (negative)

Question 3: Learning Location (Supervisors)

1 = P: PRIOR to training program
2 = T: in a formal TRAINING program
3 = S: on SITE, after employment
4 = E: related employment EXPERIENCE
5 = O: OTHER
6 = N: there is NOTHING to learn

Process data using the Task Inventory System (TIS) programs.

Examples of possible summary task data tables are presented in Figures 13, 14, 15, 16. In addition, the selection of training tasks is presented in Figure 17, which is an example of output from program LEVEL. For more specific information concerning the Task Inventory System (TIS) computer

programs read Volume 5, Processing Survey Data: Technical Appendices by Mead, Essex and Ammerman or contact the IDECC national office.

Select performance content for job training. There is a two-stage selection process for determining which tasks warrant job training. The first stage rejects any task based on the following criteria.

1. Less than 15% of the supervisors say their employees perform the task. (Desired task occurrence question)
2. A mean score of less than .75 by the employees describing how significant a part of their job is the task on a scale of 0-7. (Extent that task is part of the job question)

The second stage computes prediction coefficients for the tasks remaining from the first stage. This calculated with (1) the extent of significance data and (2) learning location data in the following prediction equation:

$$\tilde{Y} = 1.90 + .53 \text{ (Mean significance rating)} + .05 \text{ (\% citing training as location)}$$

This second step identifies certain tasks as unimportant for training, if it has both a moderately low significant rating and a moderately low training percentage (Ammerman and Essex, 1977, p. 24).

The tasks that remain are important for some type of inclusion in the training. Next this process has a method for determining the level of task development to be accomplished in training prior to employment in that job position. Using the predicted Y values for each task, it is placed on a scale of 0 through 7 indicating the level of development for the task. this leveling is presented in Figure 18.

TASK INVENTORY DATA SUMMARY
STOCKPERSON

TABLE 11 TASK OCCURRENCE

TASK	PERFORMED BY WORKERS		DESIRED BY SUPERVISORS	
	01(+)		02(+)	
	N	%	N	%
1	0	0.0	4	21.1
2	0	0.0	3	15.9
3	0	0.0	10	52.6
4	0	0.0	3	15.9
5	0	0.0	2	10.5
6	0	0.0	7	36.9
7	0	0.0	2	10.5
8	0	0.0	2	10.5
9	0	0.0	2	10.5
10	0	0.0	2	10.5
11	0	0.0	2	10.5
12	0	0.0	2	10.5
13	0	0.0	4	21.1
14	0	0.0	3	15.9
15	0	0.0	2	10.5
16	0	0.0	2	10.5
17	0	0.0	4	21.1
18	0	0.0	3	15.9
19	0	0.0	2	10.5
20	0	0.0	2	10.5
21	0	0.0	2	10.5
22	0	0.0	2	10.5
23	0	0.0	3	15.9
24	0	0.0	2	10.5
25	0	0.0	4	21.1
26	0	0.0	11	57.9
27	0	0.0	7	36.8
28	0	0.0	2	10.5
29	0	0.0	2	10.5
30	0	0.0	8	42.1

Figure 13. Example of data summary table - task occurrence desired by supervisors. (Note: the task occurrence data performed by workers is not collected.).

TASK INVENTORY DATA SUMMARY
STOCKPERSON

TABLE 3: SUMMARY OF TASKS BY
(02) PRCNT DESIRING PERF

PERCENTAGE RANGE	NO. TASKS	TASK NUMBERS
0 - 9	3	361 421 422
10 - 19	195	2 4 5 7 8 9 10 11 12 14 15 16 18 19 20 21 22 23 24 28 29 31 32 35 36 37 38 39 41 42 43 44 45 49 52 62 80 90 92 102 106 110 118 123 124 125 128 129 130 135 136 137 139 140 141 144 146 147 148 150 151 152 153 154 155 158 159 163 166 167 168 169 170 171 173 174 175 176 177 178 179 180 181 182 194 185 186 191 192 193 194 195 196 197 199 203 205 208 209 210 212 213 216 219 221 222 224 225 227 229 229 230 231 235 236 237 238 239 240 241 242 244 248 249 250 254 255 258 249 260 261 263 267 271 272 276 277 280 281 282 285 288 293 294 295 296 297 298 300 301 302 303 304 305 306 307 308 310 311 312 313 314 315 316 319 320 321 325 329 330 331 333 339 344 345 346 348 352 356 358 364 365 368 370 374 385 396 389 390 391 423 424 425 431 440
20 - 29	114	1 13 17 25 33 40 48 59 70 74 75 79 88 89 91 95 97 98 100 109 111 114 115 116 117 119 120 122 127 131 132 133 134 142 143 145 149 156 162 164 183 188 199 198 204 206 217 218 223 226 232 233 245 251 252 256 264 266 268 270 279 284 286 287 299 309 323 332 339 340 341 342 343 349 350 351 354 355 357 359 360 366 367 369 378 379 380 381 382 383 384 387 388 392 395 396 399 401 407 409 410 413 417 418 420 428 429 430 436 437 438 439 441 442
30 - 39	61	6 27 51 53 54 55 56 57 58 61 65 67 71 76 77 81 83 84 85 86 87 93 99 105 108 112 157 160 161 165 172 190 207 214 215 220 234 243 246 253 262 322 326 334 335 347 353 372 375 376 377 393 398 400 405 411 412 419 426 427 435
40 - 49	30	30 50 60 66 68 72 94 96 101 103 104 107 113 121 247 257 265 278 283 336 337 363 397 402 403 408 414 416 433 434
50 - 59	16	3 25 34 63 64 73 78 82 126 273 291 324 327 394 415 432
60 - 69	13	46 47 69 200 274 275 289 290 317 328 371 373 404
70 - 79	9	138 187 201 202 211 269 318 362 406
80 - 89	1	292
90 -100	0	

Figure 14. Example of data summary table - summary of tasks by percentage desiring performance.

TASK INVENTORY DATA SUMMARY
STOCKPERSON

TABLE 43 EXTENT TASK IS PART OF THE JOB
(93)

TASK	MEAN	SD	N	NUMBER OF RESPONSES PER CATEGORY								% PART OF JOB	% SIG PART
				0	1	2	3	4	5	6	7		
1	0.63	1.35	25	18	3	1	1	1	1	0	0	28.0	9.0
2	0.48	1.42	25	20	3	1	0	0	0	0	1	20.0	4.0
3	2.43	2.64	25	9	5	1	0	3	3	0	4	64.0	40.0
4	0.96	1.51	25	17	3	1	2	0	2	0	0	32.0	8.0
5	0.56	1.13	25	19	2	1	2	1	0	0	0	24.0	4.0
6	1.32	2.09	25	16	1	2	1	2	2	0	1	36.0	20.0
7	0.20	0.90	25	23	1	0	0	1	0	0	0	8.0	4.0
8	0.04	0.20	24	23	1	0	0	0	0	0	0	4.2	0.0
9	0.08	0.27	25	23	2	0	0	0	0	0	0	8.0	0.0
10	0.08	0.27	25	23	2	0	0	0	0	0	0	8.0	0.0
11	0.12	0.32	25	22	3	0	0	0	0	0	0	12.0	0.0
12	0.48	1.30	25	22	0	0	0	3	0	0	0	12.0	12.0
13	0.88	1.92	25	20	0	1	1	0	2	0	1	20.0	12.0
14	0.80	1.96	25	20	2	0	0	0	1	0	1	20.0	12.0
15	0.0	0.0	25	25	0	0	0	0	0	0	0	0.0	0.0
16	0.0	0.0	25	25	0	0	0	0	0	0	0	0.0	0.0
17	1.00	2.00	25	18	1	2	2	0	0	0	2	28.0	8.0
18	0.52	1.45	25	20	2	2	0	0	0	0	1	20.0	4.0
19	0.04	0.20	25	24	1	0	0	0	0	0	0	4.0	0.0
20	0.04	0.20	25	24	1	0	0	0	0	0	0	4.0	0.0
21	0.36	1.23	25	23	0	0	0	1	1	0	0	8.0	8.0
22	0.20	0.63	25	22	2	0	1	0	0	0	0	12.0	0.0
23	0.72	1.91	25	20	2	1	0	0	0	0	2	20.0	8.0
24	0.68	1.57	25	19	2	1	2	0	0	0	1	24.0	4.0
25	0.84	1.67	25	17	4	0	2	1	0	0	1	32.0	8.0
26	2.72	2.63	25	7	5	2	2	2	2	0	5	72.0	36.0
27	1.44	2.43	25	16	3	0	1	1	1	0	3	36.0	20.0
28	0.0	0.0	25	25	0	0	0	0	0	0	0	0.0	0.0
29	0.04	0.20	25	24	1	0	0	0	0	0	0	4.0	0.0
30	1.68	2.48	25	14	3	2	0	1	2	0	3	44.0	24.0

Figure 15. Example of data summary table - extent task is part of job.

TASK INVENTORY DATA SUMMARY
STOCKPERSON

TABLE 7: LEARNING LOCATION
(Q7) (SUPERVISORS)

	DISTRIBUTION OF SUGGESTED LEARNING SOURCES							PERCENTAGES				MODE	
TASK	P	T	S	E	O	N	N/R	P	T	S	E	MODE	%
1	0	0	3	0	0	1	15	0.0	0.0	15.8	0.0		78.9
2	1	0	1	0	0	1	16	5.3	0.0	5.3	0.0		84.2
3	0	0	9*	1	0	0	9	0.0	0.0	47.4	5.3	S	47.4
4	0	0	1	1	0	1	16	0.0	0.0	5.3	5.3		84.2
5	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
6	0	2	4*	1	0	0	12	0.0	10.5	21.1	5.3		63.2
7	0	0	1	0	0	1	17	0.0	0.0	5.3	0.0		89.5
8	0	0	0	1	0	1	17	0.0	0.0	0.0	5.3		89.5
9	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
10	0	0	0	1	0	1	17	0.0	0.0	0.0	5.3		89.5
11	0	0	2	0	0	0	17	0.0	0.0	10.5	0.0		89.5
12	0	0	0	1	0	1	17	0.0	0.0	0.0	5.3		89.5
13	0	1	2	1	0	0	15	0.0	5.3	10.5	5.3		78.9
14	0	1	1	1	0	0	16	0.0	5.3	5.3	5.3		84.2
15	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
16	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
17	0	0	2	1	0	1	15	0.0	0.0	10.5	5.3		78.9
18	0	0	2	0	0	1	16	0.0	0.0	10.5	0.0		84.2
19	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
20	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
21	0	2	0	0	0	0	17	0.0	10.5	0.0	0.0		89.5
22	0	1	1	0	0	0	17	0.0	5.3	5.3	0.0		89.5
23	0	0	2	1	0	0	16	0.0	0.0	10.5	5.3		84.2
24	0	0	1	1	0	0	17	0.0	0.0	5.3	5.3		89.5
25	0	0	3	1	0	0	15	0.0	0.0	15.9	5.3		78.9
26	0	1	10*	0	0	0	8	0.0	5.3	52.6	0.0	S	52.6
27	0	2	3	2	0	0	12	0.0	10.5	15.8	10.5		63.2
28	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
29	0	1	0	0	0	1	17	0.0	5.3	0.0	0.0		89.5
30	0	0	7*	0	0	1	11	0.0	0.0	36.8	0.0		57.9

Figure 16. Example of data summary table - learning location (supervisor).

TASK INVENTORY DATA SUMMARY
STOCKPERSON

TASK RELEVENCE AND LEVEL OF DEVELOPMENT

TASK	INCLUSION (RELEVENCE)	RULE(S) APPLYING	Y-VALUE (LEVEL)
1	REJECT	3,5	2.26
2	REJECT	3,5	2.15
3	SELECT		3.21
4	REJECT	5	2.35
5	REJECT	2,3,5	2.46
6	SELECT		3.13
7	REJECT	2,3,5	2.01
8	REJECT	2,3,5	1.92
9	REJECT	2,3,5	2.21
10	REJECT	2,3,5	1.94
11	REJECT	2,3,5	1.96
12	REJECT	2,3,5	2.15
13	REJECT	5	2.63
14	REJECT	5	2.59
15	REJECT	2,3,5	2.16
16	REJECT	2,3,5	2.16
17	REJECT	5	2.43
18	REJECT	3,5	2.18
19	REJECT	2,3,5	2.18
20	REJECT	2,3,5	2.18
21	REJECT	2,3,5	2.62
22	REJECT	2,3,5	2.27
23	REJECT	3,5	2.28
24	REJECT	2,3,5	2.26
25	REJECT	5	2.35
26	SELECT		3.60
27	SELECT		3.19
28	REJECT	2,3,5	2.16
29	REJECT	2,3,5	2.13
30	REJECT	5	2.79

Figure 17. Example of output from program LEVEL.

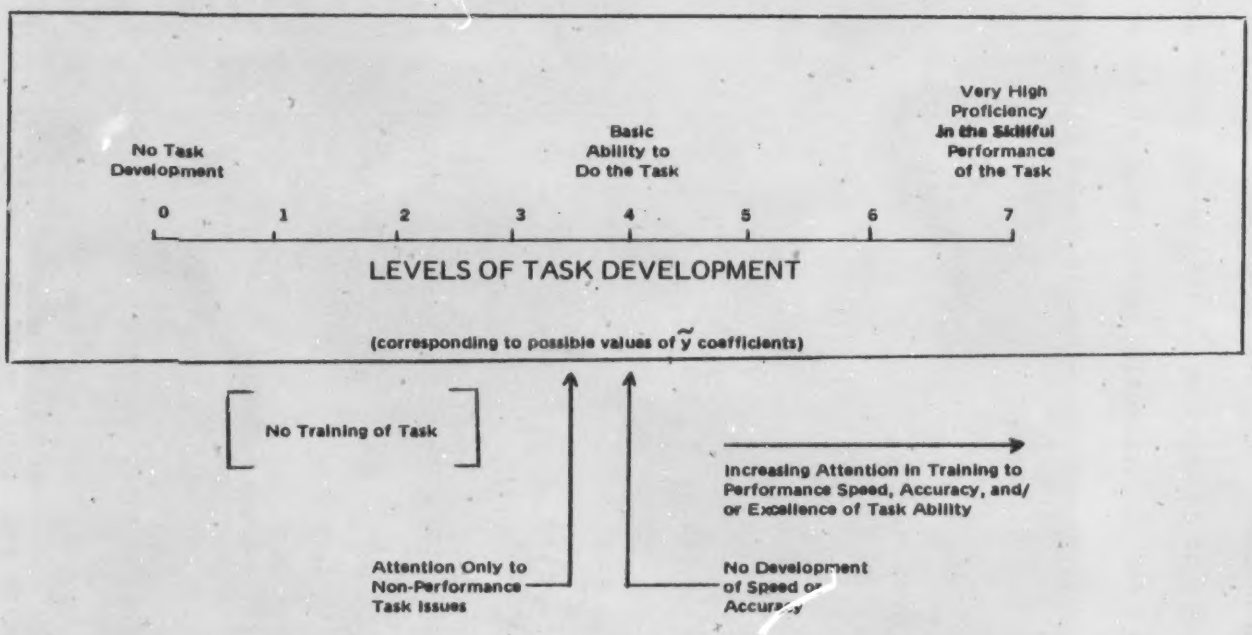


Figure 18: A scale which identifies the levels of task development.

Step 9: Write Competency Statements

Definition of a competency statement. A "competency" is a particular behavioral characteristic of an attitude, skill, knowledge or understanding generally required for the successful performance of one or more tasks. The IDECC system is based upon competencies needed to perform tasks in one or more distributive occupations.

Identifying and writing statements of knowledge, understanding, skill or attitude to be learned are accomplished after the task surveys have been completed. The following operational definitions should be used to guide the construction of the competency statements.

> Knowledge: the recall of specifics and universals, the recall of methods and processes and the recall of a pattern.
>
> Understanding: the power to make experience intelligible by applying concepts and theories; the comprehension of ideas and the ability to use abstractions in particular and concrete situations.
>
> Skill: A rather high level of mental ability; the ability to use one's knowledge effectively and readily in execution of performance; the ability to analyze, synthesize and evaluate. (Emphasis on mental skills, but may include psychomotor skills)
>
> Attitude: A mental position, a feeling or an emotion toward a fact or state; a predisposition to act in a certain way; a state of readiness that influences a person to act in a given manner. (Crawford, 1967, p. 63)

A competency may fall into one of three domains: cognitive, psychomotor, or affective. Knowledge and understanding competencies are cognitive, skill competencies are cognitive or psychomotor and attitude competencies are affective. Further discussion concerning these domains is located within the "behavioral objectives" section of this manual.

Components of a competency statement. A competency statement begins with a stem, a partial list of possible stems follows: Knowledge of, Understanding that, Skill in, Ability to, Attitutde that, An awareness that.

The stem is followed by a statement of the behavior - the knowledge or understanding the learner should have, the attitude the learner should hold, or the skill the learner should possess.

Information provided for the writer. Various information is provided for the writer of competency statements. Relevant tasks for which training is needed are listed as identified in the task inventory process. The performance level required for the task is given for each occupation in which the task has been determined as relevant. Thus, the competency statement writer should consider the relevant task statement, the occupation in which the tasks are performed, the types of occupation (i.e., entry, supervisory, mid-management), and the levels of performance.

Competency statements are written based upon the above information.

Step 10: Evaluate Competency Statements

After being written, the competency statements are then evaluated by distributive educators. These specialists assess whether or not the competency is needed to perform the specified task(s) at the level of performance determined in Step 8. The clarity of the competency statement is also evaluated. Necessary revisions are made.

CHAPTER III

DEVELOPING LEARNING ACTIVITY PACKAGES

Introduction

Chapter II described procedures for identifying tasks performed by employees in distributive occupations and developing competency statements which reflect knowledges, attitudes, and skills needed by employees to perform these tasks. The next phase of the IDECC curriculum development procedure is the development of materials to be used by distributive education teacher-coordinators and students to assist in the learning of the competencies by the students.

IDECC materials are organized into Learning Activity Packages based upon competency statement(s). This section of the IDECC procedures manual will describe the LAP development process. The sequential steps of this process are:

Step 11: Clustering Competency Statements into LAPs

Step 12: Placing LAPs into Curriculum Section

Step 13: Writing Objectives

Step 14: Writing Learning Activities

Step 15: Writing Instructional Materials

Step 16: Writing Tests and Keys

Step 17: Checking LAPs for Completeness

Step 18: Evaluating LAPs

Step 19: Revising LAPs

A Learning Activity Package may be written by curriculum experts, teacher-educators, and teacher-coordinators. The IDECC national office coordinates and contracts with a state IDECC representative activities for which the state will be responsible.

Sometimes, a state will be responsible for writing objectives, tests and keys, learning activities, and instructional materials for specified LAPs. At other times, the state will be responsible for writing a portion of a LAP.

Often, a writer's workshop will be held in the state at which time teacher-coordinators write LAPs or portions of LAPs. Workshops involving individuals who have not had experience in writing LAPs, should include training the participants in such areas as writing objectives, constructing tests, and creating instructional materials. A refresher session may be included in a workshop involving experienced LAP writers dealing with similar topics in less depth. A list of resources for reference by the workshop leader in planning these writer training sessions is provided in Appendix D.

Basic instructions provided by the IDECC national staff will be provided to the writers of LAPs. These instructions are in Appendix E. Furthermore, forms that have been developed by the IDECC national office will be used during the writing process. These forms appear in Appendix F. The evaluation form for LAP materials provided in Appendix G will be used by the person responsible at the state level for evaluating a LAP. After necessary revising or rewriting has occurred, the newly written LAP should be submitted on the forms in Appendix F. An example

of a LAP ready to be submitted to the IDECC national office, entitled, "A Model for LAP Development - The 'What' and 'Why' of Economics," is provided in Appendix H.

Procedural Steps of the LAP Development Process

Step 11: Cluster Competency Statements into LAPs

A Learning Activity Package (LAP) is based upon one or more competencies needed to perform a task(s). Only closely related competencies that can be developed concurrently through a single series of objectives should be clustered into a LAP. Clustering competency statements, where appropriate, is the first step in developing a LAP.

LAP titles and illustrations. Each LAP has a title which reflects the competency or cluster of competencies within it. In other words, the LAP title is a synthesis of the competency statement(s) and tells in a few words the main theme of the LAP.

The LAP title writer should follow these guidelines:

1. The title should be very short - about one to five words.
2. The title should be clear and straightforward.
3. The title should reflect the task(s) and competency(ies) upon which the LAP is based.

Each LAP also has an illustration on the cover page which reflects the content of the individual LAP. In addition, a brief description of the contents of the LAP is written and provided on the cover page.

LAP structure and components. The IDECC system includes a set of Learning Activity Packages (LAPs), each of which consists of a series of component parts directed toward the achievement of objectives. The successful achievement of the objectives in a LAP is considered to be

evidence of a student's mastery of the competency(ies) upon which the LAP is based. Each LAP is written to a competency or a cluster of related competencies that can be developed concurrently through a single series of objectives.

Learning Activity Packages consist of two segments, student materials and learning manager (teacher) materials, which are packaged separately. However, all components of a LAP, including both the student and learning manager sections, are developed at the same time.

Student-oriented materials. The student section of a LAP consists of the following components:

1. Cover page with LAP title
2. Pretest
3. Objective(s)
4. Individual learning activities
5. Instructional materials for individual learning activities

The above student-oriented sections is in a loose-leaf format so that the learning manager can file the student section in file folders.

Learning manager materials. The learning manager section of a LAP consists of the following components:

1. LAP title
2. Competency statement(s) and competency number(s)
3. Objective(s)
4. Group learning activities
5. Instructional materials for group learning activities
6. Posttest

7. Pretest key
8. Posttest key

Each of the above learning manager components is three-hole punched and separate from the student materials.

Figure 19 consists of two diagrams, one depicting the student section of a LAP and the second describing the learning manager section of a LAP.

Step 12: Place LAPs into Curriculum Sections

Selecting a curriculum section for a LAP. After a LAP has been titled, it is then placed in a curriculum section, based upon the competency or cluster of related competencies. A LAP is included in one and only one curriculum section.

LAPs are clustered into curriculum sections. Eleven section are now included in the IDECC system. Other curriculum sections will be added in the future and present curriculum sections may be combined or changed. The present eleven curriculum sections are as follows:

1. Advertising
2. Communications
3. Display
4. Human Relations
5. Management
6. Mathematics
7. Merchandising
8. Operations
9. Product and Service Technology
10. Selling
11. Economics and Marketing Concepts

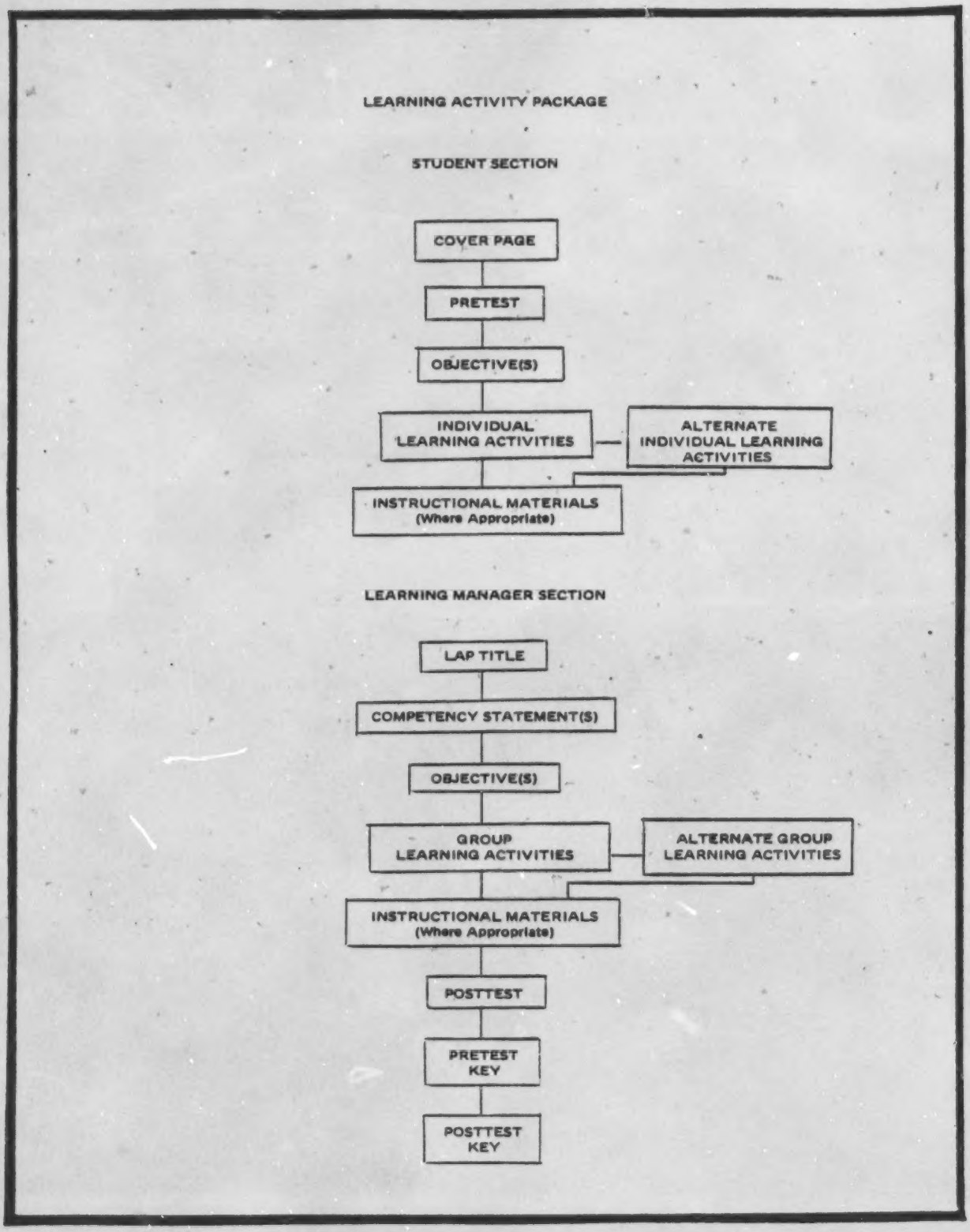


Figure 19: Structure for student and learning manager sections of a learning activity package.

Sequencing and numbering LAPs in a curriculum section. LAPs are sequenced in a curriculum section in a logical order. Although not always possible, a group of LAPs with a general theme would be placed together in the curriculum section.

The LAPs are numbered within curriculum sections. For example, the advertising section begins with LAP 1 and proceeds through the final LAP in the section. Display begins with LAP 1, etc.

LAPs are page-numbered as a separate unit. In other words, the first page of each LAP is numbered "1" and the following pages are numbered consecutively (i.e., 2, 3, 4 ...). Furthermore, the student section is numbered separately from the learning manager section of the LAP. The curriculum section name and LAP number is provided on every page of each LAP. The learning manager pages are so indicated. Therefore, a page that is separated from its LAP can be easily filed in its correct place.

Step 13: Write Objectives

Purpose of objectives. The IDECC system is based upon competencies. These competencies are developed through objectives, beginning with the easiest materials and working up to the more difficult. Each LAP consists of one or more objectives needed to be accomplished by the learner in order to master the competency(ies) upon which the LAP is based.

The objectives are an important element of the IDECC system. Well-stated objectives facilitate evaluation of the student's performance.

Components of objectives. An objective consists of the following two components: the behavior to be performed or exhibited by the learner

and the conditions (situation) under which the performance is to take place, where applicable.

1. The behavior to be performed or exhibited - This behavior is reflected by the verb of the objective. This verb is an extremely important component of the objective and must be carefully chosen. The domain (cognitive, affective, or psychomotor) and level of the domain in which the objective falls is indicated by the verb. An explanation of the domains, levels of the domains, and verbs is provided later in this section.

2. The conditions - The conditions specify the situation under which the learner is to perform and are to be included in this objective statement where applicable. Conditions may include:

1. the physical or social situation in which the performance may occur
2. any special physical demands on the learner while performing
3. the tools and equipment to be used
4. the materials, resources and aids to be used (Wray, 1974, p. 235)

The criterion level. The criterion level of acceptable performance is determined when the objectives are written. However, the criterion level is not included in the objective statement. Instead, it is cited on the test keys.

The criterion level of acceptable performance indicates the extent or exact degree of minimum proficiency required of the learner. It is consistent with the level of task performance for which the competency is required. This is the standard that will determine if the objective has been satisfactorily achieved.

The criterion level may not be included in test keys of the affective domain. The difficulty that lies in developing paper - pencil tests to evaluate attitudes may necessitate the by-passing of the criterion level in the affective domain. Setting an exact level is open to criticism (Harrison, 1975, p. 22). It is believed that higher level affective competencies are best evaluated through observations of student demonstrated behavior. If possible, some evidence of behavioral change is measured on a rating scale, such as "describe your feelings toward ..." or "support the following statement ...".

The objectives are written so that they are directed to the student, not in "third person" format.

Classification of objectives. Objectives are categorized and leveled according to the purpose they serve. The three basic classifications, or "domains," are:

1. Cognitive
2. Affective
3. Psychomotor

Cognitive domain - The cognitive domain deals with "recall or recognition of knowledge and the development of intellectual abilities and skills" (Bloom, 1956, p. 7).

Affective domain - The affective domain deals with "changes in interest, attitudes, and values and the development of appreciations and adequate adjustment" (Bloom, 1956, p. 7).

Psychomotor domain - The psychomotor domain deals with physical activity (muscular coordination). In order to perform a given task,

a physical skill is necessary. This physical skill lies within the psychomotor domain (Simpson, 1966).

Leveling within the domains. Each of the three domains (cognitive, affective, and psychomotor) consists of a number of different "levels of learning." These levels are determined by the degree of sophistication expected of the learner.

Cognitive domain - The cognitive domain consists of the following six levels, sequenced from low to high:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

Affective domain - The five levels of the affective domain, from low to high, are as follows:

1. Receiving
2. Responding
3. Valuing
4. Organization
5. Characterization

Psychomotor domain - The psychomotor domain consists of the following five levels, ordered from low to high:

1. Perception
2. Set
3. Guided Responses

4. Mechanism

5. Complex Overt Response

Levels 1 and 2 of the psychomotor domain, while they are necessary parts of learning and performing skills, do not in themselves show a psychomotor ability or skill.

Each of the levels of the three domains are described in Figures 20, 21 and 22 as perceived by Bloom (1956), Krathwohl (1964) and Simpson (1966). For the cognitive and affective domains, verbs identified by Bloom (1956) and Krathwohl (1964) falling within a level are listed.

Figure 23 contains a listing of illustrative verbs that are used in objectives as identified by Gronlund (1970, pp. 53-56). Gronlund categorized the verbs based upon the type of behavior.

Objective writers should refer to these listings of verbs so that the objectives accurately reflect the thinking of the writer.

Ordering objectives within a LAP. Usually there is more than one objective in a LAP which needs to be sequenced. The objectives should be ordered from simple to complex and in hierarchical order beginning with the lowest level of learning in each domain. They should form a logical chain so that a student can expect to achieve one objective before another. This means that lower level objectives are always presented before higher level objectives, etc.

Objectives should be written and included within the affective doamin only when identified by industry as critical to performance.

The number of objectives written depends upon the nature and difficulty of the competency to be learned.

OBJECTIVES

Leveling the Cognitive Domain

The cognitive domain deals with recall or recognition of knowledge and the development of intellectual abilities and skills.

KNOWLEDGE
Involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material.

- To define
- To distinguish
- To recall
- To recognize
- To acquire
- To develop
- To outline
- To identify
- To list

COMPREHENSION
Represents the lowest level of understanding. It refers to a type of understanding such that the individual knows what is being communicated and can make use of the materials without necessarily relating it to other materials or realizing its fullest implications.

- To translate
- To prepare
- To comprehend
- To interpret
- To grasp
- To distinguish
- To conclude
- To estimate
- To differentiate
- To explain
- To summarize
- To demonstrate by example
- To see implications, effects, and consequences

APPLICATION
The use of abstraction in particular and concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods.

- To apply
- To employ
- To relate
- To predict
- To use
- To develop

ANALYSIS
The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. The relationships of the parts to the whole.

- To discriminate
- To analyze
- To detect
- To infer
- To categorize
- To choose
- To discover
- To select

SYNTHESIS
The putting together of elements and parts so as to form a new whole. This is the creative level.

- To create
- To propose
- To integrate
- To plan
- To design
- To synthesize
- To formualte
- To perceive
- To organize
- To prepare
- To compile
- To incorporate
- To visualize

EVALUATION
Judgments about the value and methods for given purposes using given criteria or developing one's own criteria.

- To judge
- To assess
- To compare
- To appraise
- To evaluate
- To decide
- To determine

Figure 20: Objectives within the cognitive domain. Adapted from: Taxonomy of Educational Objectives by Benjamin S. Bloom.

OBJECTIVES

Leveling the Affective Domain

The affective domain deals with changes in interest, attitudes, and values and the development of appreciations and adquate adjustment.

RECEIVING
The lowest level of the affective domain. It requires simply that the student be aware of a given phenomenon--can include any of three levels of receiving (i.e., awareness, conscious willingness to receive, or selected attention).

To be aware of	To accept
To be conscious of	To listen to
To recognize	To attend to
To realize	To appreciate
To be sensitive to	To prefer
To tolerate	To be alert to

RESPONDING
The student makes some observable change of behavior as a result of a stimulus--a personal value has not yet been developed. Response levels include compliance, willingness to respond, or satisfaction in response.

To comply with	To ask
To obey	To participate
To volunteer to	To enjoy
To practice rules	To acquaint
To respond with interest	To engage in
To perform	To assume responsibility
To cooperate with	To accept responsibility
To contribute to	To find pleasure in

VALUING
The student develops a feeling that the concept has personal worth (i.e., value to the student as an individual). Levels include acceptance, preference, and committment.

To feel (to feel strongly about)	To examine
To be loyal to	To value
To be devoted to	To prefer

ORGANIZATION
The student is able to determine a relationship to other things he values--he is able to see how a new value relates to other values already held. Values can be classified into an ordered relationship which is consistent and harmonious.

To relate
To form judgments
To weigh
To identify characteristics
To find out and crystalize

CHARACTERIZATION
The student responds according to a set of values--unaware that a value is influencing him, a total philosophy guiding his reactions.

To change behavior
To revise judgments
To face facts and conclusions
To approach problems objectively
To develop a conscience
To develop a philosophy of life

Figure 21: Objectives within the affective domain. Adapted from: Taxonomy of Educational Objectives, Handbook II: Affective Domain, David R. Krathwohl, David McKay Co. Inc., 1964.

OBJECTIVES

Leveling the Psychomotor Domain

The psychomotor domain deals with physical activity—i.e., physical skill in accomplishing a given task.

1. Perception*—The student becomes aware of action, objects, and relationships connected with a skill. He becomes aware of what is important in performing the skill—becomes aware through sight, sound, smell, and taste.

2. Set*—Primarily a cognitive behavior—knowledge of all aspects involved in the performance of a physical act (i.e., laying out tools needed for a repair job).

3. Guided Responses—Making an actual attempt to do the physical activity through imitation or trial and error.

4. Mechanism—The student can perform the skill without help and with a slight degree of confidence. He can accomplish a larger skill by combining lesser abilities but may not always do it by all the proper procedures.

5. Complex Overt Response—The student can accomplish a given task with the least possible amount of time and energy. His actions become automatic or intuitive.

*Levels 1 and 2, while they are necessary parts of learning and performing skills, do not in themselves show a psychomotor ability—or skill.

Figure 22: Objectives within the psychomotor domain. Adapted from: "The Classification of Educational Objectives, Psychomotor Domain," (Project Report, University of Illinois, 1966) by Elizabeth Jane Simpson.

Guidelines. Writing objectives is a critical task. Objectives provide a link between the competency statement(s) and the learning activities. Furthermore, objectives provide the student with a direction and path to follow in order to master the competency(ies). A set of guidelines to follow in writing objectives is provided in Figure 24.

Gronlund's Illustrative Verb List

General Instructional Objectives

Analyze	Compute	Interpret	Perform	Translate
Apply	Create	Know	Recognize	Understand
Appreciate	Demonstrate	Listen	Speak	Use
Comprehend	Evaluate	Locate	Think	Write

"Creative" Behaviors

Alter	Paraphrase	Reconstruct	Rephrase	Rewrite
Ask	Predict	Regroup	Restate	Simplify
Change	Question	Rename	Restructure	Synthesize
Design	Rearrange	Reorganize	Retell	Systematize
Generalize	Recombine	Reorder	Revise	Vary
Modify				

Complex, Logical, Judgmental Behaviors

Analyze	Conclude	Deduce	Formulate	Plan
Appraise	Contrast	Defend	Generate	Structure
Combine	Criticize	Evaluate	Induce	Substitute
Compare	Decide	Explain	Infer	

General Discriminative Behaviors

Choose	Detect	Identify	Match	Place
Collect	Differentiate	Indicate	Omit	Point
Define	Discriminate	Isolate	Order	Select
Describe	Distinguish	List	Pick	Separate

Social Behaviors

Accept	Communicate	Discuss	Invite	Praise
Agree	Compliment	Excuse	Join	React
Aid	Contribute	Forgive	Laugh	Smile
Allow	Cooperate	Greet	Meet	Talk
Answer	Dance	Help	Participate	Thank
Argue	Disagree	Interact	Permit	Volunteer

Language Behaviors

Abbreviate	Edit	Punctuate	Speak	Tell
Accent	Hyphenate	Read	Spell	Translate
Alphabetize	Indent	Recite	State	Verbalize
Articulate	Outline	Say	Summarize	Whisper
Call	Print	Sign	Syllabify	Write
Capitalize	Pronounce			

"Study" Behaviors

Arrange	Compile	Itemize	Mark	Record
Categorize	Copy	Label	Name	Reproduce
Chart	Diagram	Locate	Note	Search
Cite	Find	Look	Organize	Sort
Circle	Follow	Map	Quote	Underline

Arts Behaviors

Assemble	Dot	Illustrate	Press	Stamp
Blend	Draw	Melt	Roll	Stick
Brush	Drill	Mix	Rub	Stir
Build	Fold	Mold	Sand	Trace
Carve	Form	Nail	Saw	Trim
Color	Frame	Paint	Sculpt	Varnish
Construct	Hammer	Paste	Shake	Wipe
Cut	Handle	Pat	Sketch	Wrap
Dab	Heat	Pour	Smooth	

Figure 23: Gronlund's listing of verbs.

Drama Behaviors

Act	Display	Express	Pass	Show
Clasp	Emit	Leave	Perform	Sit
Cross	Enter	Move	Proceed	Start
Direct	Exit	Pantomime	Respond	Turn

Mathematical Behaviors

Add	Derive	Group	Number	Square
Bisect	Divide	Integrate	Plot	Subtract
Calculate	Estimate	Interpolate	Prove	Tabulate
Check	Extrapolate	Measure	Reduce	Tally
Compute	Extract	Multiply	Solve	Verify
Count	Graph			

Laboratory Science Behaviors

Apply	Demonstrate	Keep	Prepare	Specify
Calibrate	Dissect	Lengthen	Remove	Straighten
Conduct	Feed	Limit	Replace	Time
Connect	Grow	Manipulate	Report	Transfer
Convert	Increase	Operate	Reset	Weigh
Decrease	Insert	Plant	Set	

General Appearance, Health, and Safety Behaviors

Button	Dress	Fasten	Taste	Unzip
Clean	DRink	Fill	Tie	Wait
Clear	Eat	Go	Unbutton	Wash
Close	Eliminate	Lace	Uncover	Wear
Comb	Empty	Stop	Untie	Zip
Cover				

Miscellaneous

Aim	Erase	Lead	Relate	Stake
Attempt	Expand	Lend	Repeat	Start
Attend	Extend	Let	Return	Stock
Begin	Feel	Light	Ride	Store
Bring	Finish	Make	Rip	Strike
Buy	Fit	Mend	Save	Suggest
Come	Fix	Miss	Scratch	Supply
Complete	Flip	Offer	Send	Support
Consider	Get	Open	Serve	Switch
Correct	Give	Pack	Sew	Take
Crease	Grind	Pay	Share	Tear
Crush	Guide	Peel	Sharpen	Touch
Designate	Hand	Pin	Shoot	Try
Determine	Hang	Position	Shorten	Twist
Develop	Hold	PResent	Shovel	Type
Discover	Hook	Produce	Shut	Use
Distribute	Hunt	Propose	Signify	Vote
Do	Include	Provide	Skip	Watch
Drop	Inform	Put	Slide	Weave
End	Lay	Raise	Spread	Work

Figure 23. Continued

Guidelines for Writing Objectives

1. The objective should be stated so that one, and only one interpretation of the objective is reasonably possible.
2. The objective should be stated clearly and simply.
3. The performance or specific behavior which the student will be required to demonstrate should be stated.
4. The unique condition or situation in which the student will demonstrate the performance should be stated. The conditions should be included in the objectives where applicable.
5. The criterion level or extent of minimum proficiency required of the learner should be determined but not written into the objective statement. A suggested criterion level should appear in the test keys.
6. The objective should not be a compound one, but rather a single objective.
7. The objectives should be listed in hierarchical order beginning with the lowest level of learning in each domain when appropriate.
8. A sufficient number of objectives should be written so that the competency(ies) will be achieved.
9. Most objectives should be measurable and lend themselves to simple, objective evaluation or ratings whenever appropriate.
10. Both qualitative and quantitative objectives should be given consideration.

Figure 24: Guidelines for writing objectives.

Step 14: Write Learning Activities

Learning activities are written for the objective(s) in a LAP. A learning activity is an educational exercise completed by the learner (Popham, Schrag, and Blockhus, 1975, p. 117). It is designed to assist the student in reaching an objective(s) for competency development. In a LAP, a learning activity falls into one of two categories, individual or group. Group activities may be used in a small group or large group setting. Four learning activities will be written for each objective or cluster of objectives.

Self-contained or simulated activity. Each objective or cluster of objectives in every LAP must include at least one self-contained

activity. The first series of individual learning activities should be self-contained. A self-contained activity does not require outside resources. All instructional materials needed in order to complete the learning activity are included within the LAP.

If it is not possible to write a self-contained activity, a simulated learning activity can be used. A simulated learning activity should require only those resources commonly found in a distributive education classroom or laboratory. Simulation often involves role playing. If other students are needed for the simulated activity, the following information should be provided:

1. The number of student required
2. An explanation of what the students are to do
3. Whether or not the students need a certain knowledge and/or skill in order to participate. If so, the required knowledge and/or skill should be stated.

Variety of learning activities. Learning activities will be varied to accommodate the individual needs and learning styles of students. The IDECC systematic approach calls for the student to "cycle" through the learning activities until the posttest is passed. Varying the learning activities within a LAP will contribute to meeting the individual needs and learning styles of the students. Furthermore, distributive education programs consist of a diverse group of students with varied career interests in the field of marketing and distribution. This situation calls for different types of learning strategies.

Individual and group learning activities. Two individual and two group learning activity series are to be provided for each objective or

cluster of objectives. Individual learning activities are contained in the student section of the LAP and group activities are in the learning manager's section of the LAP.

Referencing of resource materials. Outside resource materials will be referenced in the learning activities that are not self-contained. Use of these outside resource materials will be restricted to those meeting the specific criteria established by IDECC.

Resources may include the following:

1. Books
2. Magazines and journals
3. Audio-visual materials
4. Resource persons
5. Business establishments

Resources will be referenced in learning activities by topic and page number when appropriate. The format for referencing a resource should be a standard format. For consistency, a book should be referenced as follows:

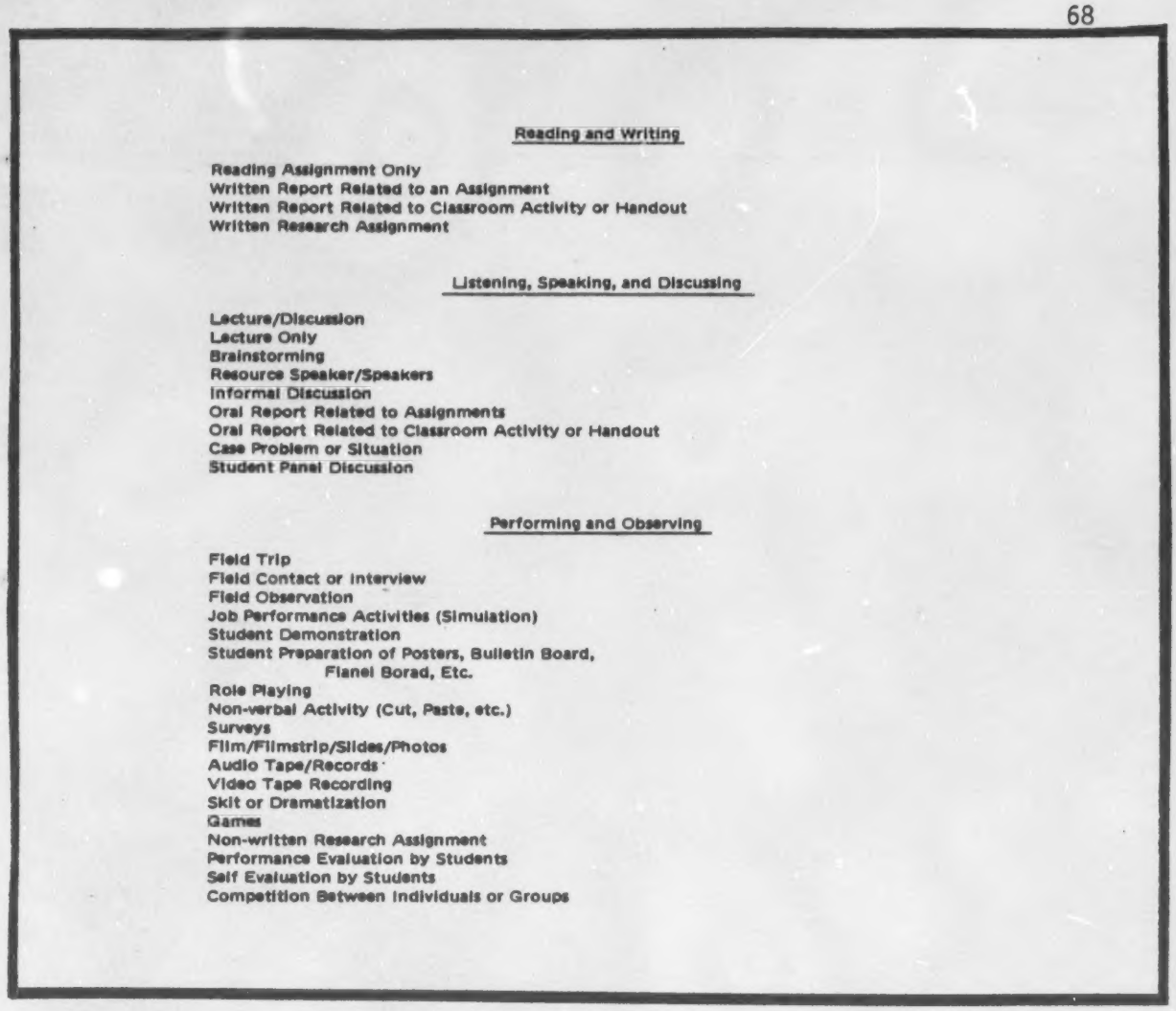
Title, Last Name of Author(s), Publisher, Edition Number, Copyright Date, page number(s).

Examples:

Fundamentals of Selling, Wingate, Nolan; South-Western Publishing Company, 10th education, 1976, pages 326-327.

Retail Selling, Bodle, Corey; Gregg Division of McGraw-Hill Book Company, 2nd edition, 1977, pages 148-149.

Types of learning activities and teaching techniques. Suggestions for types of learning activities and teaching techniques that could be used are classified in Figure 25 based upon categories cited by Popham,



Reading and Writing

Reading Assignment Only
Written Report Related to an Assignment
Written Report Related to Classroom Activity or Handout
Written Research Assignment

Listening, Speaking, and Discussing

Lecture/Discussion
Lecture Only
Brainstorming
Resource Speaker/Speakers
Informal Discussion
Oral Report Related to Assignments
Oral Report Related to Classroom Activity or Handout
Case Problem or Situation
Student Panel Discussion

Performing and Observing

Field Trip
Field Contact or Interview
Field Observation
Job Performance Activities (Simulation)
Student Demonstration
Student Preparation of Posters, Bulletin Board, Flanel Borad, Etc.
Role Playing
Non-verbal Activity (Cut, Paste, etc.)
Surveys
Film/Filmstrip/Slides/Photos
Audio Tape/Records
Video Tape Recording
Skit or Dramatization
Games
Non-written Research Assignment
Performance Evaluation by Students
Self Evaluation by Students
Competition Between Individuals or Groups

Figure 25: Suggested learning activities and teaching techniques.

Schrag, and Blockhus (1975, p. 125). These learning activities and teaching techniques were identified by Olson (1973) as being present in the IDECC system.

The type of learning activities and teaching techniques selected should reflect the level of the competency(ies) upon which the LAP is based.

Guidelines. Guidelines to follow when writing the learning activities section of a LAP are provided in Figure 26.

Guidelines to Follow When Writing the Learning Activities Section

1. All learning activities in a LAP should be directly related to the objectives being addressed. A learning activity should not be included if this is not the case.
2. The assigned sections should only contain the information required for the development of the objective.
3. Only relevant sections of the referenced materials (i.e., books, journals, etc.) should be assigned.
4. The learning activities should be realistic. Consideration should be given to the time required for the activity and the probable availability of the resources.
5. The directions for a learning activity should be simple, clear, and complete. They should include "what" is to be done and "how" to do it.
6. If a learning activity involves an interview or discussion, suggestions should be given for the kinds of questions to ask or areas to pursue (Quinn, et. al., 1978).
7. Learning activities should enable the development of the objective. Therefore, the learning activity should be directed toward the development of the appropriate level of the objective. For example, if the objective is of a higher order, the learning activity must adequately build to that level.
8. The learning activities should include a variety of experiences for different types of students.
9. Learning activities specific to certain occupations or occupational areas should be written only when appropriate and clearly identified within the LAP.
10. Learning activities may be designed to develop one or more objectives.

Figure 26: Guidelines for writing learning activities.

Step 15: Write Instructional Materials

Instructional materials are provided in the student and learning manager sections of a LAP. Instructional materials should be suitable for reproduction by the learning manager (Harrison, 1975). These instructional materials may provide one of the following:

1. Information the student must have in order to achieve the objective(s) and pass the posttest.
2. materials for the learning manager to use such as transparency masters
3. specific and detailed instructions for a learning activity
4. student self-checks to assist the student in learning the material and reaching the objective

No materials or illustrations in a publication are to be used in the LAP instructional materials unless written permission has been received from the publisher. Plagiarism is always to be avoided. Instructional materials are to be the work of the LAP writer.

The instructional materials will be in the order the student is to use them. Also, the materials will be ordered based upon the learning activity sequence so that the first learning activity cited would have its instructional materials coming first, etc.

The difficulty level of the instructional materials will be based on the level of the competency(ies) upon which the LAP is based.

Avoiding sex and racial bias and stereotyping. During the development of the entire IDECC Learning Activity Package, a conscious effort will be made to minimize sex and racial bias and stereotyping. A set of guidelines to assist the writer in preparing materials that are free from sex bias is provided in Figure 27. These guidelines are divided into the following sections:

1. Language
2. Roles and Traits
3. Illustrations

A checklist to be used for reviewing LAPs for racist content is included in Figure 28. The items are divided into two categories, illustrations, and written content.

Guidelines. Guidelines to follow when preparing instructional materials are provided in Figure 29.

Guidelines to Follow to Avoid Sex Bias

Language

1. Use language that encompasses both sexes:
   a. Use he and she, her and his.
   b. Use nongonder referents you, student and person.
   c. Use plurals they, students and people.
   d. Use articles rather than personal pronouns a, an, the.
   e. Use passive voice for verbs. (This should be used sparingly.)
   f. Omit pronouns whe ` possible.

2. Use a universal or neutral term instead of man. Avoid occupational titles that are sex biased. (e.g., use salesperson instead of salesman.)

3. Interchange the use of men and women, he and she with women and men, she and he. Do not maintain the female first only when the reference is to a stereotypical female occupation.

4. To avoid inconsistency, be rigorous in your attention to language. A disclaimer that he means he or she should not be made.

Roles and Traits

1. Represent all occupations as appropriate to either sex, paying particular attention to nontraditional representations.

2. Assign a variety and balance of emotional and character traits to both sexes. Negative and positive traits should be presented as appropriate for the situation rather than the sex.

3. Describe the physical attributes and personal appearance of males and females without judgments about what is "proper."

4. Represent girls and women in equal numbers to boys and men in all situations, including subject matter, illustrations, quotation, bibliographic sources, participants, and speakers.

5. Whenever situations or differences between the sexes are acknowledged, treat the identified problem thoroughly.

Illustrations

1. Make sure that the number of illustrations are balanced between the sexes.

2. Depict a variety of roles, traites and activities for each sex. Show role reversal and non-traditional representations.

3. Avoid cartoons and illustrations which are demeaning.

4. Represent both sexes in illustrations. Whereever possible, assure that portrayals of groups include both females and males.

Figure 27: Guidelines for avoiding sex bias. (Adapted from: "A Checklist for Evaluating Materials," U.S.O.E. Contract No. 300760460 and "Guidelines to Ensure Sex Fairness in Education Division Communications and Products," Women on Words and Images, Inc., The National Advisory Council on Women's Educational Programs, Washington, D.C.

Checklist for Reviewing LAPs for Racist Content

N = Never S = Sometimes O = Often U = Usually A = Always

Written Content	N	S	O	U	A
1. Does the LAP instructional meterial state or imply that physical characte - istics, accents, or other personal traits are disadvantages in an occupation?					
2. Does the instructional material encourage minority children to accept limited rights and limited roles?					
3. Does the instructional material use derogatory terms (e.g., "boy" instead of "man" when referring to an adult)?					
4. Is testing suggested as the best way to determine one's ability to perform a job?					
5. Does the instructional material explain the employee's rights as well as responsibilities?					
6. Does the instructional material explain the employer's responsibilities to the employee as well as employer rights and expectations?					
Illustrations					
1. Do minority people appear as unskilled workers?					
2. Do minority people appear as serving white people?					
3. Do white people appear as serving minority people?					
4. Do minority people appear as thinkers, planners, or highly skilled workers?					
5. Are minority people isolated from white co-workers?					
6. Do minority people appear as supervising or training white workers?					
7. Are minority people shown as being supervised or taking directions?					
8. Do minority workers appear as looking indecisive or confused?					
9. Are minority people stereotyped by skin color, hair styles, facial features, etc.?					

Figure 28: Checklist for reviewing LAPs for racist content. (Adapted from: "Racism in Career Education Materials: How to Detect It and How to Counteract Its Effects in the Classroom," Council on Interracial Books for Children and Foundation for Change, Racism and Sexism Resource Center for Educators, New York, 1975).

Guidelines to Follow When Preparing Instructional Materials

1. Cognitive information should usually appear first in the instructional materials for a learning activity followed by other materials such as self-checks, activity explanations, etc.
2. Each page of the instructional materials should have a title at the top of it that clearly reflects the content of that page.
3. Only information necessary for the achievement of the objective should be included.
4. The materials should be divided into sections with clear headings. A massive portion of information without sections should be avoided.
5. The information should be as accurate and up-to-date as possible.
6. The information should be applicable to all occupations involved, whenever possible.
7. Plagiarism must be avoided.
8. Footnotes may be used but only when necessary.
9. The student should be addressed by using the "second person."
10. The difficulty level should be based on the level of the competency(ies).
11. The instructional materials should be free of racial and sex bias or stereotypes. Examples and illustrations should reflect the wide range of students in distributive education.

Figure 29: Guidelines for preparing instructional materials. (From Quinn, et al., 1978).

Step 16: Write Tests and Keys

Definition of pretest. After the objectives have been written, an evaluative instrument is developed that is used to assess the student's performance. The function of the pretest is to determine "where the learner is" in terms of his/her knowledge, skill or attitude. It is designed to allow the determination of whether or not the learner has reached the objective(s) before going through any learning activities.

Definition of posttest. Another evaluative instrument is developed that is used to determine if the student has achieved the objective(s) after going through a learning activity(s). This test should be different from the pretest unless the following condition exists. If a test

requires a specific behavior and there is only one way to measure the behavior, the pretest and posttest would be identical.

Pretest and posttest development. The pretests and posttest will be designed in accordance with the behavior specified in the objectives. It is essential that the pretest and posttest are congruent with the objectives.

The tests are criterion-referenced measurements as opposed to norm-referenced. Traditionally, norm-referenced testing has been the most widely used method in determining student achievement. This procedure requires the comparison of student scores in order to arrive at a grade. Often, the normal curve is used as a tool in this comparison.

On the other hand, criterion-referenced testing compares the student's work with a pre-determined level of performance (criterion level). If the student has met this level, she/he has met the objective(s).

A single pretest is written to cover all objective within the LAP, with items clustered according to the objectives and identified as such. For example, objective A would have a set of items on the pretest, etc.

The posttest uses the same format as the pretest. Again, a single posttest is written to cover all objectives within the LAP, with items clustered according to the objectives and identified as such.

The tests will be valid and reliable. If the test is valid, it measures what it is supposed to measure. If the test is reliable, it measures

accurately the student's mastery of the objective. An effort will be made to assure that the tests adequately measure the intended objective(s). Procedures for assuring validity and reliability of the tests are being formulated by IDECC.

Pretest and posttest keys. Each pretest and posttest must have a key or rating sheet written for it. Correct answers to objective test items will be given on the key. Where appropriate, the rationale for test answers will be included with the key (i.e., why is "A" more acceptable than "B", "C", or "D"?).

A model answer or key-point outline will be provided for essay or oral test questions. New information not found in the learning activities will not be included in the model answer or key-point outline.

A rating sheet will be developed for an application level objective which is not easily measured with objective test items. The rating sheet will be in the form of a checklist with directions written to the learning manager.

The rating sheet will have the essential criteria upon which to rate the student's performance. This criteria will be clear, observable, and of reasonable length. The rating sheet will provide a scale that allows the learning manager to make clear judgments about the level of performance and a criterion level.

Criterion level. Each pretest and posttest will have a suggested criterion level given. This suggested criterion level is included with the test keys in the learning manager's section of the LAP. The criterion level will reflect the minimum level of acceptable performance of the

Guidelines to Follow in the Development of Pretests and Posttests

1. The test items should correspond directly to the behavior specified in the objective, including the situation, action, objects, and limits (Congruence).

2. The test item should be so stated that the student clearly understands what is expected (Comprehensibility).

3. The test item should be stated in such a way that a competent evaluator can make a clear and unequivocal decision as to whether or not the student has demonstrated an acceptable behavior (Objectivity).

4. The test item should be structured in such a way that an acceptable response to the item constitutes sufficient evidence, in and of itself, that the learner has accomplished the corresponding objective (Integrity).

5. If two or more test items correspond to a single objective, each item in the set should be a true alternative, in that a student who passes (or fails) one item on a given occasion would be expected to pass (or fail) any other item in the set (Equivalence) (Harrison, n.d.).

6. The test item should not provide irrelevant clues to the correct answer. Common types of clues include:
   1. grammatical inconsistencies that rule out some, or all, possible wrong answers
   2. verbal associations that make the correct answer obvious
   3. specific determiners, such as "sometimes" or "always," that increase the probability that a statement will be correct or incorrect
   4. miscellaneous factors, such as longer more detailed statements tending to be correct

7. The test item should be written so that it does not provide clues to the answers of other items in the test.

8. The test item should be written so that it is at the proper level of difficulty. This level is determined by the level of the objective within the learning domain. For example, a higher level cognitive objective calls for a more difficult test item.

9. The test item should be written to adequately sample the learning outcomes to be measured.

10. The test item should include a time limit only when a time limit is essential to performance on a job.

11. The test item should be in positive form whenever possible.

12. Test writers should strive for objectivity in the items. However, at time subjective test items may need to be included.

Figure 30: Guidelines for developing pretests and posttests.

relevant tasks as identified by the task survey process. Criterion levels are subject to local interpretation and/or consideration.

Guidelines. Guidelines to follow in the development of pretests and posttests are presented in Figure 30.

LEARNING ACTIVITY PACKAGE CHECKLIST

Student Section of the LAP

Does the student section of the LAP include the following items?

Cover Page	YES	NO
LAP Title	YES	NO
Illustration	YES	NO
Brief Description of LAP	YES	NO
Pretest	YES	NO
Objective(s)	YES	NO
Individual Learning Activities (self-contained)	YES	NO
Alternate Individual Learning Activities	YES	NO
Appropriate Instructional Materials	YES	NO

Learning Manager Section of the LAP

LAP Title	YES	NO
Competency Number(s) and Statement(s)	YES	NO
Objective(s)	YES	NO
Group Learning Activities	YES	NO
Alternate Group Learning Activities	YES	NO
Appropriate Instructional Materials	YES	NO
Posttest	YES	NO
Pretest Key	YES	NO
Posttest Key	YES	NO

Figure 31: Checklist for completeness of LAP.

Step 17: Check LAPs for Completeness

Before a LAP is considered written, it will be checked to ensure that is is complete. Form to be used for checking the completeness of a LAP is provided in Figure 31. After this review, the LAP is sent to the IDECC national office for evaluation.

Step 18: Evaluate LAPs

Each LAP is evaluated by the national office to assure that all IDECC materials are of high quality. The evaluation form provided in Appendix G should be used for this purpose.

Guidelines included in this manual will be used as a base for this evaluation. Each component of the LAP will be evaluated, including the following:

1. Cover page
2. Objectives
3. Learning activities
4. Instructional materials
5. Pretest
6. Pretest key, model answers, key-point outlines, and/or rating sheet and criteria
7. Posttest
8. Posttest key, model answers, key-point outlines, and/or rating sheet and criteria

Test validation. Each test will be validated by the national office to ensure that the items are measuring the knowledges, attitudes, and skills stated in the objectives.

Racial and sex bias review. Each LAP will be evaluated to assure that the materials minimize racial and sex bias, using the guidelines provided in this manual.

Step 19: Revise LAPs

When only minor editing is necessary to consider a LAP complete, of high quality, and ready for field testing, the national office will make

the changes. However, if a major revision is necessary, the LAP will be returned to the person responsible for the development of the LAP. This process of evaluation and revision will continue until it has been determined that the LAP is complete, of high quality, and ready for field testing.

CHAPTER IV

PROCEDURES FOR FIELD TESTING IDECC CURRICULUM MATERIALS

Introduction

Field testing is a very important step in the development of IDECC curriculum materials. Without a well organized field test it would be difficult to determine the relevance, effectiveness, and useability of the materials. Therefore, the field test process will address the following four phases:

Step 20: Planning the field test

Step 21: Implementing the field test

Step 22: Evaluating the learning activity packages

Step 23: Revising the learning activity packages

All materials developed for the IDECC consortium will be subjected to a field test prior to dissemination. Recommendations for field test have been made by the IDECC curriculum development task force and adopted by the executive committee. Based on these recommendations the IDECC project staff has developed within this chapter guidelines for field testing IDECC materials.

Procedural Steps of the Field Testing Process

Step 20: Plan Field Test

A well developed plan for the process of field testing materials is a necessity in reaching the field test objectives by the most efficient and effective manner.

A field test manager which has been appointed from the IDECC national office or by the IDECC representative will be concerned with four areas of planning:

1. Site selection
2. Sequencing events
3. Material preparation
4. Inservice training

Select sites. It has been determined by the IDECC Curriculum Task Force that the consortium representative of each member state is the best qualified individual to select the field test sites. Three factors should be considered in site selection: (1) the geographical location of the sites, (2) the personnel to be selected as field testers, and (3) the type of instructional program available at the prospective field test sites.

1. Geographical locations - IDECC has determined that a minimum of three states, with two sites each, will participate in the field testing of each learning activity package and other related materials which require field test. This provides a minmum of six sites per package. Geographical representation will be taken into consideration depending on the type of occupational materials to be field tested. (e.g. Recreation

and Tourism learning activity packages should be field tested in areas where these types of occupations are represented.)

2. Personnel - The success or failure of any field test can greatly depend on the personnel involved. Type and extent of professional experience of the learning managers are important in selecting field test sites.

IDECC has determined that the individuals who are selected as field testers will have classroom experience with IDECC. It is preferred that the field tester have at least two years teaching experience in distributive education. An additional factor which a field test manager may desire to take into consideration is the innovativeness and attitude of the learning manager toward change.

3. Types of programs - It is important to select sites which have facilities and equipment to adequately field test the learning activity packages involved. Since the IDECC materials will be utilized in a variety of programs such as cooperative, laboratory, specialized, general and one, two and three year programs, it is desirable to select sites which would be representative of all types of programs.

The sites should also provide adequate enrollment in the program to provide ample exposure of materials to a number of students.

To further aid in site selection, forms FT-1 and FT-2 may be useful in gathering information on sites and learning managers (See Figures 32 and 33).

Sequence events. Good planning involves sequencing events in such a way that the field test activities may occur in a logical order, utilizing the available time to the best advantage possible.

SITE INFORMATION

Name of Institution White High School
Address 105 Wheeling St.
Indianola, New York 31602

How long has the distributive education program been in existence?

Number of years including current year 6

Level of Program ___ Secondary X Post Secondary ___ Other ___

Specify ___

Is the program an in-school program (simulated, project method, etc.) or a cooperative program?

In-School X

Cooperative ___

Other (describe) ___

Is the program a general program or specialized program?

General ___

Specialized X

Indicate area of Specialization Fashion Merchandising

How many students are enrolled in the program? 35

How many of the students would be involved in the field test? 35

How long has the program been utilizing the IDECC system? 2 years

Figure 32: An example of a site information questionnaire (See appendix I for blank form).

Once materials have been developed, they will be edited by the IDECC staff, revised if needed by the state which developed the materials and once again edited before the materials are disseminated for field test. During the first revision stage, IDECC will coordinate selection of field test sites and inservice of the instructors in those sites. The materials will be field tested and evaluated in the sites and revisions will be based upon the results. The events will take place in the following sequence (See Figure 34).

LEARNING MANAGER'S BACKGROUND QUESTIONNAIRE

Name Linda G. Salsbury

School White High School Address 106 Wheeling St.

City Indianola State New York Zip 31602

How many years of experience have you had teaching in the field of marketing and distribution? (Include current year)

5 Years, Secondary Level _____ Years, Post-Secondary Level

2 Years, Adult x Part time/ ___ Full time _____ Years, other-Specify _____

How many years of occupational experience have you had in the field of marketing and distribution?

3 Years

How long have you been teaching at your present school? 5 Years (Include current year)

What is your highest level of formal education? Masters in Education

Are you currently using the IDECC system? x Yes _____ No

How long have you used the IDECC system? Answer even if you are not currently using the system, but have used it in the past. 2 years

How often, on the average, have you used the IDECC system?

Describe frequency Three times a week

Describe method of use Students follow competency records

Have you been a writer of IDECC materials? _____ Yes x No

If yes, describe responsibilities. N/A

Have you used any other competency based education system? _____ Yes x No

If yes, describe. N/A

Figure 33: An example of a learning manager's background questionnaire (See appendix I for blank form).

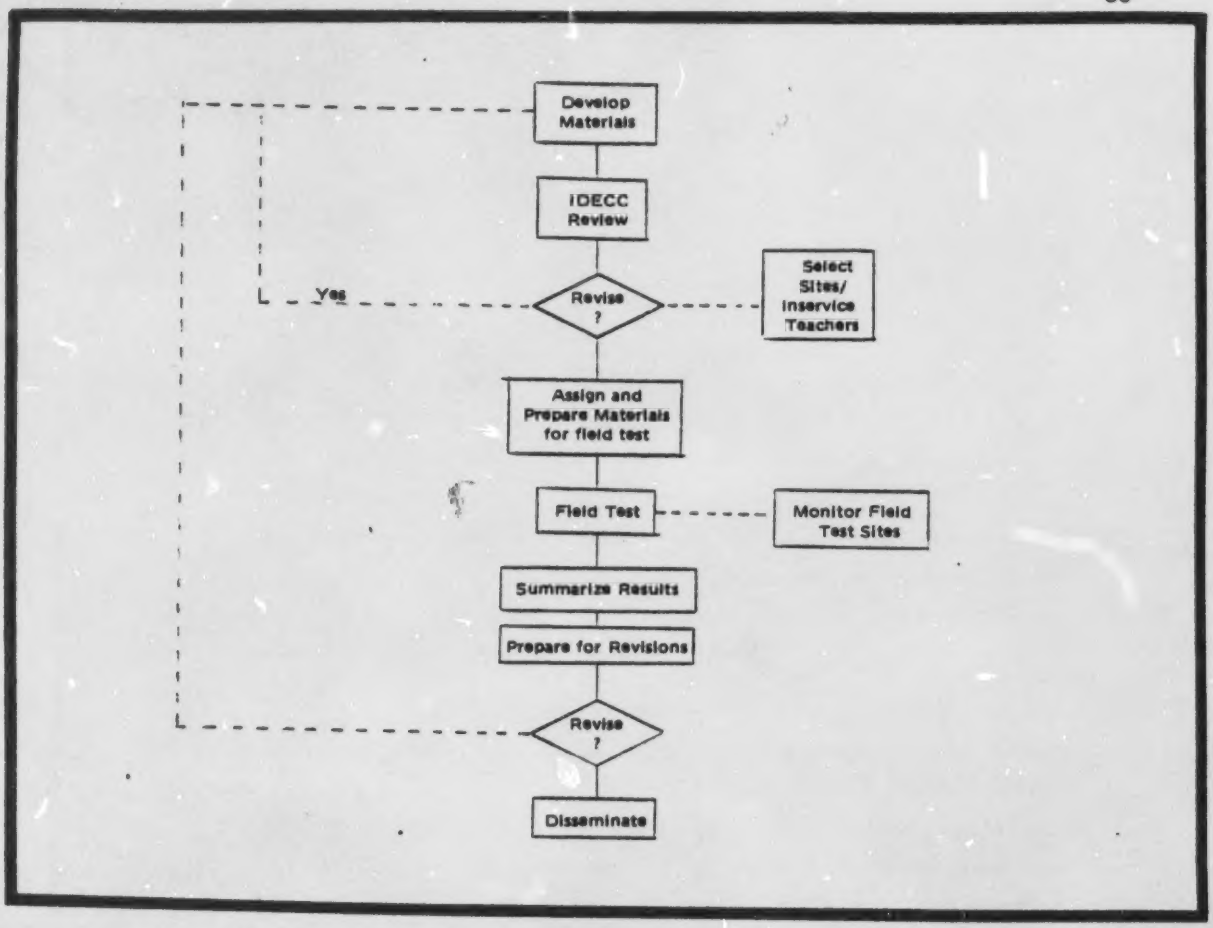


Figure 34: Sequence of field testing IDECC curriculum materials.

Prepare materials. Each learning activity package will be field tested by a minimum of six sites. However, one LAP per site would not be sufficient for several students. Therefore, it is recommended that the number of copies be allocated at the rate of one copy per five students. For example, if a site has 50 students using the lap, they would need at least 10 learning activity packages. To determine the number of any one learning activity package needed for field test, total the laps needed for all sites.

For example: Students which will use LAP 72.

Site	Students		1 per 5		LAPs Needed
1	45	÷	5	=	9
2	77	÷	5	=	26
3	13	÷	5	=	3
4	62	÷	5	=	13
5	26	÷	5	=	5
6	17	÷	5	=	4
					60 LAPs needed for field test

Every LAP will include an evaluation form (See Figure 35) to be completed by the learning manger and five student evaluation forms (See Figure 36). The evaluation form should be clearly marked as to the learning activity package that is being evaluated and the site which is completing the evaluation. It may be necessary to later contact a site to clear up some point on evaluation. Each learning activity package is numbered. This number can be used along with a site number as an identification code. It may be further desired to utilize student numbers within each site for the purpose of tracing a student evaluation if needed. The code number would take the following appearance:

01	072	001	=	01072001
Site	LAP	Student Number		Evaluation Code for Student Evaluation Forms

(Leave off the student number for the evaluation code on the learning manager's evaluation form.)

A field test assignment sheet will be used to manage the dissemination of the materials and collection of the evaluation data (See Figure 37). Field test materials will be stamped "Field Test" to prevent the possibility of confusing the field test materials with the finalrevised materials.

EVALUATION CODE 01072
(Site No. and Package No.)

LEARNING MANAGER
LEARNING ACTIVITY PACKAGE EVALUATION

Learning Activity Package No. 72 Curriculum Section AD

PRETEST	(Circle one)
1. The Pretest measures each of the objectives in the package.	(YES) NO
2. It is easy to distinguish in the Pretest which objectives were met and which were not.	(YES) NO
3. The directions were clear in the Pretest.	(YES) NO
4. The educational level of the Pretest is satisfactory for the competency(ies) being developed.	(YES) NO

Additional comments: _____

PRETEST KEY	(Circle one)
1. The pretest key states criteria of acceptable performance for each objective.	YES (NO)
2. The criteria of acceptable performance is at a realistic level.	(YES) NO
3. The answers for the objective tests are correct.	YES (NO)
4. Possible answers or solutions are given for subjective tests.	(YES) NO
5. All answers are clearly stated.	(YES) NO

Additional comments: Objective B missing level of criteria. Answer to No. 3 is incorrect.

Figure 35: An example of a learning manager's learning activity package evaluation (See appendix L for complete form).

EVALUATION CODE 01072001
(Site No., LAP No., Student No.)

LEARNING ACTIVITY PACKAGE

Student Evaluation

1. Were the directions easy to read and understand? (YES) NO

   If no, why? _____

2. Did you like using this learning activity package? (YES) NO

   If no, explain. _____

3. Which learning activities did you use? Indicate letter of activity.

   Individual D

   Alternate Individual _____

   Group A, B, D

   Alternate Group _____

4. Did the learning activities help you to learn what is stated in the objective(s)? YES (NO)

   If no, which activity(ies) were not helpful? Indicate letter of activity within appropriate group. (Do not comment on activities not used.)

   Individual _____

   Alternate Individual _____

   Group D

   Alternate Group _____

5. Did the objective(s) tell you exactly what was expected of you? (YES) NO

   If no, which objective(s) were not clear?

   _____

6. How much time did it take you to learn the material in the package? Indicate to closest minutes. 1 hr. 45 min.

Figure 36: An example of a student learning activity package evaluation (See appendix L for complete form).

FIELD TEST ASSIGNMENT SHEET

Site and Packages Number	Number of Assigned Packages	Evaluation Returned	
		Teacher	Student
01072	9	1	30
02072	15	1	55
03072	5		
04072	7	1	52
05072	10		20
05072	13	1	40
01073	9	1	
02073	15	1	15
03073	5		
04073	7	1	
05073	10		
06073	13		
01074	9		
02074	15		
03074	5		
04074	7		
05074	10		
06074	13		
01075	9		
02075	15		
03075	5		

Figure 37: An example of a field test assignment sheet (See appendix J for blank form).

Provide inservice. Personnel involved in a field test must have the knowledge and skill to obtain the expected outcome. Therefore, it is necessary to provide inservice to those who lack the competencies to conduct an effective field test.

It is desired that the field test learning manager have classroom experience with IDECC and therefore, would not need inservice training on the IDECC system itself. However, if this is not the case, it would be necessary to include in the workshop agenda an orientation and utilization session on the IDECC system. An orientation session may also be necessary to assist the administration of the field test site to have a better understanding of IDECC and the purposes of the field test. Inserivce should also be provided to those who would be supervising the field test sites. This inservice again may vary depending on the present knowledge and past experience with the IDECC system. Once field test personnel and supervisory personnel have been established and trained, the need for inservice may decline or cease to exist. These individuals may be used repeatedly for field testing materials.

There is no universal agenda for field test workshops due to the variety of knowledges and experiences of the potential field test personnel. However, the following topics may serve as a guide for tailoring the workshop to meet the needs of the learning managers, administrators and supervisors involved in the field test process.

Suggested Agenda Topics for Field Test Workshop

Orientation to IDECC

Organization of the Learning Activty Package

Utilization of the IDECC System

Orientation to the Development of New Materials

Purpose of Field Test

Procedures for Field Test

Criteria for Evaluation

Completing Evaluation Forms

Submitting Evaluation Forms

Assignment of Materials

Familization of Field Test Learning Activity Packages

Supplies, Resources and Equipment for Field Test

Purpose of the Supervisory Visits

Orienting Your Administration

Step 21: Implement Field Test

Once the planning phase of the field test process is complete, it is time to put into effect the actual field test. The implementation phase consists of a series of activities. These activities are listed below with the person which should be responsible for the implementation of the activity.

	Activity	Person Responsible
1.	Prepare field test site	Learning manager
2.	Assign packages to students	Learning manager
3.	Visit site to check readiness	Field test manager or designated field test supervisor
4.	Implement learning activity packages	Learning manager

5.	Evaluate learning activity packages	Student users and learning manager
6.	Maintain student competency records	Learning manager
7.	Monitor field test sites by phone, letter and visits	Field test manager and/or field test supervisor
8.	Complete observation records on field test sites	Field test supervisor
9.	Complete class achievement record	Learning manager

Prepare field test site. The field test site will be prepared by the learning manager. In this preparation, the learning manager would need to assure the arrangement of their classroom and/or laboratory will best facilitate the use of competency based education. Resources and other supplies which are required by the packages may need to be obtained.

Assign LAPs to students. The learning manager would need to make a decision as to the learning activity packages which will be assigned to the students. LAPs should be assigned in accordance with the career objective of the stuent. Figure 38 supplies a student learning activity assignment sheet which will maintain a record of LAPs assigned to each student, the learning activities used by the student, the level of performance and the time it takes the student to actually achieve each competency in the package.

Visit site to check readiness. Once the learning manager has set up the site and assigned the student packages, the designated field test manager or supervisor of the field test should check the site for readiness in the following ways: (1) the facility should be conducive to

STUDENT LEARNING ACTIVITY

ASSIGNMENT SHEET

Student Name Lou M. Mentos Occupation Assistant Buyer

Learning Activity Packages Assigned	Learning Activity(ies) Used	Level of Performance	Time Taken to Develop the Competencies in the Package
01072	Group	95	1 hour
01073	Group	87	45 min.
01075	Group/Individual	93	2 hours
01078			
01080			
01081			
01084			
01085			
01086			
01087			
01090			
01091			
01092			

Figure 38: An example of a student LAP assignment sheet (See appendix M for blank form).

competency based instruction, (2) the learning manager should have enough learning activity packages and (3) the learning manager should have accurately anticipated and obtained needed resources and/or supplies. The site readiness check could eliminate problems which may be encountered later and therefore is an important checkpoint in the process.

Implement learning activity packages. At this point the learning manager is ready to implement the LAPs. Learning activities selected for use should be in accordance with the number of students requiring the LAP. For example, a LAP needed by a few students may use individual activities, whereas, a LAP needed by several students would call for a group activity. This selection is made at the discretion of the learning manager. Efforts should be made, however, for purposes of field test, to utilize as many of the learning activities as possible.

Maintain student LAP records. LAP records will be kept on each student by the learning manager (See Figure 38). A separate record is maintained for each student. Each LAP assigned to the student should be recorded in the first column. In addition, each learning activity used by the student should be indicated under the column "learning activities used." The level of performance column should show the final performance by the student which was acceptable to the learning manager. The last column would reflect the time it took the student to reach the acceptable level of performance. As pretest and posttest are administered and graded, copies for each student should be submitted with the evaluation forms in order to run a reliability check on the tests.

Complete observation records on field test sites. When visits are made, an observation form will be completed to report effective use of learning activity packages, problems of the learning manager and the completion of field test responsibilities (See Figure 39). Visits should be arranged when the supervisor can make the most effective use of the visit.

Complete class achievement records. The competency records previously mentioned are used to compile an overall class achievement record. This record will supply class information such as (1) the actual number of students to use the package, (2) the number of students to master the competency(ies), (3) total number of students who used each activity and (4) the average time of completion for the individual activities. This type of information will be used in evaluation and revision of the materials (See Figures 38 and 40).

Step 22: Evaluate Field Test Materials

In order to determine the outcome of the field test, evaluations must be performed by both the learning manager and the students who used the competency packages. The data will be utilized for revision of the materials and future development of new materials. Effective appraisal can only be performed when the evaluator is provided criteria by which to assess the materials. Therefore, both the learning manager and the student are provided with an evaluation questionnaire for each learning activity package (Refer back to Figures 35 and 36). Additional information which may be helpful in relation to theoutcome of the field test is the nature of the field test site and the background and qualifications of the learning manager. Consequently, it would be advisable to have each learning manager complete a questionnaire providing the information (Refer back to Figures 32 and 33). This questionnaire was also utilized in assisting in the selection of sites and personnel.

Complete learning manager evaluation. The learning manager will evaluate a learning activity package upon completion of the package either

FIELD TEST OBSERVATION REPORT

Site White High School

Learning Manager Linda G. Salsbury

1. Students were utilizing the field test materials at the time of the visit.

Yes X No _____

If no, indicate why not. N/A

If yes, answer the following:

1. Students appear to be interested in working with the field test materials.

Yes X No _____

If no, give rationale for this observation. _____

N/A

2. Students are meeting the objectives of the packages within a reasonable length of time.

Yes _____ No X

If no, indicate the information obtained which has caused the delay.

Organization of the resources delated the students. Talked with teacher and made suggestions. She is going to reorganize to reduce this problem.

Figure 39: An example of a field test observation report (See appendix K for complete form).

CLASS ACHIEVEMENT RECORD

Learning Activity Package No.	Number of Students Assigned the Package	Number of Students to Pass Post Test	Number of Students to Complete each Activity				Average Time of Completion of Individual Activities
			Individual	Alternate Individual	Group	Alternate Group	
01072	30	28	5		30		50 min.
01073	20	20			20	10	-
01074	7	7	7	2			45 min.
01075	30	30	9		30		1 hr. 15 min.

Figure 40: An example of a student achievement record for a field test site (See appendix M for blank form).

by individual and/or group use. The general areas of evaluation completed by the learning manager are as follows:

1. Pretest/Posttest
2. Pretest/Posttest Keys
3. Format of the Learning Activity Package
4. Learning Activities

For a more detailed evaluation questionnaire refer back to Figure 35. The learning manager should make an effort to utilize as many of the learning activities as possible. It is anticipated within the field test of at least six sites for each learning activity package that each of the activities will be utilized by one or more sites.

Complete student evaluation. The student will fill out an evaluation form for each learning activity package upon completion of the package (Refer back to Figure 36). Students should be advised at the beginning of the field test to record the amount of time it takes them to complete the learning activity package, the activities they used, and their general opinions as they work through the package or participate in group activities.

Learning manager's responsibilities. The learning manager is responsible for the following activities during the field test:

1. Prepare field test site
2. Assign packages to students (Refer back to Figure 38)
3. Implement packages
4. Maintain student competency records (Refer back to Figure 38)
5. Complete evaluation forms (submit for every 5 LAPs)(Refer back to Figures 35 & 36)
6. Compile class achievement record (Refer back to Figure 40)

The "class achievement record" is compiled utilizing the "student learning activity assignment sheet" (Refer back to Figures 38 and 40). Both records are submitted to the field test manager at the conclusion of the field test. The time needed for field testing the learning activity packages should be at a minimum rate of approximately one per week. This allows ample time for implementation and completion of the necessary evaluation and records. Too little time allowed may cause the learning manager to hurridly evaluate the packages and thus defeat the purpose of the field test. Student evaluation forms and learning manager evaluation forms should be submitted approximately every five weeks.

Compile evaluation summaries and achievement records. Once the evaluations have been submitted from all sites for a learning activity package, the field test manager will complete a summary evaluation form for both learning manager's evaluation and student evaluations. The summary evaluation forms tally all the information from all six sites (See Figures 41 and 42). At the conclusion of the field test, each learning manager completes the Class Achievement Record (Refer back to Figure 40) and individual Student Achievement Records (Refer back to Figure 38) and submit both records to the field test manager. The field test manager records the information from the six Class Achievement Records for the learning activity package onto a Summary Achievement Record (See Figure 43).

All three summary evaluation records (Achievement, Learning Manager, and Student) are used in the revision process.

Compile test data for reliability check. The test data from the pretest and posttest will be subjected to a reliability check. Therefore, it is crucial to collect for each student the responses for each item on both

Package No. _____

SUMMARY
OF
LEARNING MANAGERS' EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGES

PRETEST	Evaluation Tally: Yes	No
1. The pretest measures each of the objectives in the package.	𝍸 1	
2. It is easy to distinguish in the pretest which objectives were met and which were not.	𝍸 1	✓
3. The directions were clear in the pretest.	𝍸 1	
4. The educational level of the pretest is satisfactory for the competency(ies) being developed.	𝍸 1	

Additional comments: _____

PRETEST KEY	Evaluation Tally: Yes	No
1. The pretest key states criteria of acceptable performance for each objective.		𝍸 1
2. The criteria of acceptable performance is at a realistic level.	1111	11
3. The answers for the objective tests are correct.		𝍸 1

Figure 41: An example of a summary of learning manager's evaluation for learning activity packages (See appendix N for complete form).

the pretest and posttest for each learning activity package used by the student. As mentioned previously, the learning manager will submit a pretest for every student attempting a LAP and a posttest for each student completing a LAP. The data from the pre and posttest will be

SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE NO. 72

	Yes	No
1. Were the directions easy to read and understand? If no, why?	111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111	111 111
2. Did you like using this learning activity package? If no, explain Too boring, takes too long, Not realistic enough. Too many things to do.	111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111	111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 111 11
3. Which learning activities did you use? Indicate letter of activity. I. Individual: A-50 B-46 C-52 D-50 II. Alternate Individual: A-15 B-17 C-16 D-14 III. Group: A-200 B-196 C-192 D-198 IV. Alternate Group: A-17 B-16 C-18 D-18		

Figure 42: An example of a student summary evaluation form for learning activity packages (See appendix N for complete form).

SUMMARY
OF
STUDENT ACHIEVEMENT DATA
FOR
LEARNING ACTIVITY PACKAGE NO. 72

Number of Packages Field Tested	Number of Students Completing Package	Average Level of Performance	Average Time of Completion
59	208	86	1 hr. 15 min.

Average Number of Times Individual Activity is used	Number of Times Alternate Individual Activity is used	Number of times Group Activity is used	Number of Times Alternate Group Activity is used
52	17	200	18

Figure 43: An example of a summary of student achievement for a particular learning activity package (See appendix N for complete form).

compiled and appropriate programs will be used in order to determine the reliability of the tests used in the LAPs.

Step 23: Revise

The revision process is a very important and vital phase in the development of curriculum materials. Without this step and a hopefully reoccurring step, there is not much point in the field test process.

Basis for revision. Revisions will be based on the summary forms presented in the evaluation section. The field test manager will conduct a review of the summary forms for each learning activity package. The needed revisions are then recorded on the "Revisions for Learning Activity Package" form (See Figure 44). The reviser may use this form as a guide and a checklist when making revisions. When actual revisions are made, the original forms for developing materials should be utilized and attached to the revision form (See "Developing Learning Activities" Chapter). These attachments should be acknowledged in the "check when completed column" on the revision form.

Workshop for revisions. The recommended atmosphere for revisions is in a workshop environment. In order to utilize time and resources efficiently, the field test manager will have materials organized with the revision form completed for each learning activity package, blank forms for developing materials, resources and preferably utilize previous IDECC writers as revisers. Suggested agenda items are as follows:

1. Orientation to field test
2. Inservice or review on developing IDECC learning activity packages
3. Procedures for revisions
4. Revision of materials
5. Edit revisions

REVISIONS
FOR
LEARNING ACTIVITY PACKAGE NO. 72

PRETEST	Revision Made Indicate Attachments
Revisions Needed:	
O.K.	

PRETEST KEY	Revisions Made Indicate Attachments
Revisions Needed:	
Objective B needs a criterion level	90% No Attachment
Answer to No. 3 needs to be corrected	15% mark up No Attachment

Figure 44: Revisions for LAPs (See appendix N for complete form).

Once the revisions are made and typed, the writers will edit the materials for corrections and improvements. Upom completion of revisions, materials are ready to be submitted to IDECC for review, duplication and dissemination.

BIBLIOGRAPHY

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Ammerman, H.L. and Pratzner, F.C. Performance Content for Job Training: Introduction. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, March, 1977.

Ammerman, H.L. Performance Content for Job Training: Stating the Tasks of the Job. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, March, 1977.

Ammerman, H.L. Performance Content for Job Training: Identifying Relevant Job Performance. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, March, 1977.

Ammerman, H.L. and Essex, D.W. Performance Content for Job Training: Deriving Performance Requirements for Training. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, March, 1977.

Bloom, Benjamin S. et. al., Taxonomy of Educational Objectives - The Classification of Education Goals; Handbook I: Cognitive Domain, New York: David McKay Company, 1956.

Briggs, Gerry, Feller, Debbie, Gelman, Dale, and Strydesky, Rebecca, "Plan for Developing Competency-Based Programs of Study," 1975.

"A Checklist for Evaluating Materials," U.S.O.E. Contract Number 300760460.

Crawford, L.C. "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Washington, D.C.: U.S. Office of Education, December, 1967.

"Developing Competency-Based Programs of Study," Unpublished Paper, University of Maryland, 1975.

"Development of Criterion Referenced Instruments for Distributive Education Programs," Interim Report, Project No. VTAD-5 C3-0007, Florida Department of Education, Tallahassee, Florida, 1973.

Fardig, Glen E. Handbook for the Development of Vocational Education Modules, Lexington, Kentucky: Curriculum Development Center for Kentucky, 1975.

"Final Results, IDECC Pilot School Results", No Author, 1974.

Gleason, James R. Bold New Directions, Columbus, Ohio: Ohio Distributive Education Materials Laboratory, 1976.

"Guidelines on Pilot and Field Testing of Curriculum Products," No Author, Education Retrospective, 1975.

"Guidelines to Ensure Sex Fairness in Education Division Communications and Products," Women on Words and Images, Inc. for The National Advisory Council on Women's Educational Programs, Washington, D.C.

Harrison, Wayne. IDECC Learning-Manager's Guide, Wisconsin, Madison: Interstate Distributive Education Curriculum Consortium, 1975.

Kerlinger, Fred N. Foundations of Behavioral Research, Second Edition, Holt, Rinehart and Winston, Inc., Chicago, 1973.

Krathwohl, David R. Bloom, Benjamin S., Masia, Bertram B. Taxonomy of Educational Objectives - The Classification of Educational Goals; Handbook II: Affective Domain, New York: David McKay Company, 1974.

Management Handbook for the Production of Vocational Educational Modules, Competency Based Vocational Education Unit, Bureau of Vocational Education, Frankfort, Kentucky.

Mead, M.A., Essex, D.W., and Ammerman, H.L. Performance Content for Job Training: Processing Survey Data: Technical Appendices. Columbus, Ohio: The Center for Vocational Education. The Ohio State University, March, 1977.

Melching, William H. and Borcher, Sidney D. Procedures for Constructing and Using Task Inventories. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1973.

Olson, Jeffrey R. "An Analysis of Learning Activities in Competency-Based Distributive Education." Unpublished Master's Paper, The University of Wisconsin, 1973.

Popham, Estelle L., Schrag, Adele Frisbie, Blockhus, Wanda. A Teaching-Learning System for Business Education. New York: Gregg Division, McGraw-Hill Book Company, 1975.

Quinn, Karen M., Hamilton, James B., Norton, Robert E., Fardig, Glen E., Harrington, Lois. Module Development Handbook, Columbus, Ohio: The National Center for Research in Vocational Education, 1978.

Simpson, Elizabeth Jane. "The Classification of Education Objectives, Psychomotor Domain," Project Report, University of Illinois, 1966.

Wray, Ralph D. "Developing and Utilizing Learning Activity Packages." Current Perspectives in Distributive Education, Dubuque, Iowa: Kendall/Hunt Publishing Company, 1974.

GLOSSARY OF TERMS

GLOSSARY OF TERMS

The following definitions will provide clarification of the terminology as used in this manual:

Absolute achievement: achievement of a particular goal or task, without reference to other students' work (i.e., either the student has achieved competency or he hasn't, regardless of the performance of the remainder of the class).

Affective domain: that area of learning which deals with student attitudes (as opposed to specific knowledges or skills).

Career-oriented curriculum: a curriculum designed to prepare a student for a particular career goal (as opposed to a general marketing curriculum).

Cognitive domain: that area of learning which deals with student knowledge (as opposed to attitudes or skills). It is one of three learning domains into which LAPs objectives are categorized.

Competency: a skill, knowledge, or attitude required for a person to perform a task.

Competency-based instruction: instruction based on actual competencies required for a specific occupation (as opposed to subject-matter based curriculum).

Competency record: a listing of all the competencies required for a given occupational career.

Condition: the situation in which the fulfillment of an objective is to take place which may be used, etc.

Cooperative program: a vocational program which involves work experience and class instruction both of which are related to the students' occupational goal.

Criterion level: level of acceptable performance. A suggested minimum criterion is identified on each test key.

Criterion-referenced testing: testing intended to measure absolute achievement (as opposed to norm referenced testing). Tests in a LAP are criterion-referenced.

Curriculum section: a section of the IDECC system based upon one instructional area. Examples of IDECC sections include advertising, communications, display, human relations, management, mathematics, merchandising, operations, product/service technology, and selling.

Domain: a category of learning objectives. There are three basic domains in which the LAPs objectives fall - cognitive, affective, and psychomotor.

Field test: to implement instructional materials on a trial basis in the actual situation in which they will be used. The purpose of a field test should be to determine the useability, effectiveness and relevance of the materials and to detect any revisions which may be needed.

Field test site: the setting (classroom, laboratory or shop) in which instructional materials are used.

Field test supervisor: a field test supervisor is one who checks on the field test site to determine if the learning manager is having any problems using the materials being tested and/or needs any assistance in regard to the field test.

Function: an arbitrary division of a job into functional categories of related tasks for descriptive purposes which pertains to the role of a distributive education teacher-coordinator.

IDECC (Interstate Distributive Education Curriculum Consortium): a group of states that is jointly repsonsible for the development of learning activity packets for distributive education occupations.

IDECC representative: each consortium state appoints an individual as the IDECC representative of its state. This individual serves as the state contact person for both the IDECC National Office and personnel within the state he or she is representing.

Instructional materials: materials included in a Learning Activity Package that accompany a learning activity or test. These may include handouts, transparency masters, detailed instructions, self-checks, etc.

Instructional program codes: taxonomies specifically defined by the United States Office of Education for the purpose of categorizing marketing and distribution occupations.

LAP: Learning Activity Package

Learning activities: written or performance exercises which develop attitude, knowledge and/or skill competencies.

Learning activity package: a collection of materials designed to provide training toward a career goal in a distributive occupation. Each individual LAP contains a pretest, learning activities, instructional materials, posttest and test keys. These materials are designed to fulfill the objectives written from the competency statements.

Learning manager: the term refers to a new role for the traditional D.E. coordinator - that of an individual who organizes and coordinates learning experiences for the student. The role of instructor or "disseminator of knowledge" is greatly reduced.

Norm-referenced testing: testing intended to measure achievement in comparison to other students (as opposed to criterion-referenced testing). The tests in a LAP are not used in this way.

Objective: a specific statement which specifies the exact behavior or performance expected of a student.

Occupational scope: a selection of occupations within the boundaries and limits of an instructional program code for the purpose of conducting task surveys.

Performance level: a general indication of each task's appropriate level of training development which allows distinctions to be made between no training, basic performance ability, and advanced task proficiency.

Performance requirement(s): a general category of observable behaviors which describes what a person will be doing as he functions in the role of a distributive education teacher-coordinator. In this study, performance requirement is the same as task.

Posttest: provided in each LAP, the posttest is designed to measure the student's mastery of the given objective(s) after he/she has completed appropriate learning activities. Items on the posttest are clustered and identified based upon LAP objectives.

Pretest: the pretest is intended to identify those students who have the adequate knowledge, attitude or skill and do not, therefore, need to complete a learning activity(ies). Items on the pretest are clustered and identified based upon LAP objectives.

Project Method Program: a program which utilizes projects rather than on-the-job experience to develop competencies a student will need to enable him or her to perform the tasks required by his or her chosen occupation.

Psychomotor domain: that area of learning which deals with skills and physical abilities (as opposed to knowledges or attitudes). It is one of three learning domains into which LAPs objectives are categorized.

Relevant task: a direct relationship to the frequency and importance criteria of a task to the work performance situation. The following relevancy criteria should be employed:

a. value of 15% or more for the supervisors' frequency rating of what tasks workers should perform.

b. mean value of .75 or more for the employees' rating of the extent the task is important to the job.

Reliability: If a test has reliability, it will measure the same set of objects repeatedly and get similar results. (Kerlinger, 1973, p. 442)

Self-contained activity: an activity which requires no outside resources, textbooks, or other materials. There is a minimum of one self-contained activity in the learning activity section for each objectives of every LAP.

Simulated program: a program which imitates job situations in order for the students to develop competencies under circumstances which are as realistic as possible. Often used in schools where it is not feasible to place students in a job related to their chosen occupation.

Task: a meaningful unit of work activity, performed on the job by one worker within some limited period of time. It is a purposeful job-oriented activity of a distributive education teacher-coordinator while utilizing the IDECC system.

Universal job description: a composite of tasks rated by a sample of respondents relevant to an occupation as defined by relevancy criteria.

Validity: a test is considered valid if it measures what it is supposed to measure (the objective).

APPENDIX A

A Summary of The Recommendations of The IDECC Curriculum Development Task Force as Modified and Approved by The IDECC Executive Committee

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A SUMMARY OF THE RECOMMENDATIONS OF THE IDECC CURRICULUM DEVELOPMENT TASK FORCE AS MODIFIED AND SUBSEQUENTLY APPROVED BY THE IDECC EXECUTIVE COMMITTEE

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February, 1978

A SUMMARY OF THE RECOMMENDATIONS OF THE IDECC CURRICULUM DEVELOPMENT TASK FORCE AS MODIFIED AND SUBSEQUENTLY APPROVED BY THE IDECC EXECUTIVE COMMITTEE

February, 1978

Authorization

At its regular meeting, held October 28 and 29, 1977, in Columbus, Ohio, the IDECC Executive Committee established four task forces to develop guidelines and recommendations for 1) a philosophical base; 2) a policies and procedures manual for IDECC operations; 3) curriculum development; and 4) project needs. Each of the task forces were to be comprised of IDECC Executive Committee members, representatives from other member states, and other qualified distributive education personnel. Dr. Mary Anderton, Memphis State University, was appointed chairperson of the third task force dealing with curriculum development. Cathy Ashmore, Ohio Distributive Education Materials Laboratory, was also appointed to the task force, with additional members to be named by the chairperson.

Procedures

At the annual IDECC Consortium meeting, held December 5, 1977, in Atlantic City, New Jersey, the purposes of the task force were announced and suggestions requested for additional members. In a preliminary meeting, a tentative list of concerns/objectives were submitted by the chairperson and informally approved by the Executive Committee. Following the Consortium meeting, it was requested that the IDECC Interim Director assume the responsibility of inviting specified personnel to serve on the task force. With one exception, all individuals contacted agreed to participate in the process of recommending guidelines

for curriculum development. A two-day meeting was held January 3 and 4, 1978.

The recommendations of the task force were summarized, in writing, by the interim director, subsequent to the meeting. Following review and revision by the IDECC staff, the written summary was submitted, by mail, to individual task force members for approval. As a result of this review process, minor revisions were made to the written document.

On February 7, 1978, the task force recommendations were submitted to the IDECC Executive Committee. A full day of review and discussion resulted in the adoption, with modifications, of the task force recommendations. This document, therefore, represents the combined efforts of the Curriculum Development Task Force, IDECC staff, and the IDECC Executive Committee.

Membership

IDECC is indebted to the following individuals who served as official members of the Curriculum Development Task Force:

Dr. Mary Anderton	Memphis State University	Tennessee
Ms. M. Catherine Ashmore	Ohio State University	Ohio
Dr. Vivien Ely	Virginia Commonwealth Univ.	Virginia
Ms. Karen Leonard	IDECC National Office	Ohio
Ms. Patty Marco	Waunakee High School	Wisconsin
Mr. Horace Robertson	Dept. of Public Instruction	North Carolina
Dr. Joe Robinson	University of Wyoming	Wyoming

Consultants

In addition to the task force personnel, IDECC staff members served as consultants, offering input and suggestions as requested by the chairperson. Individuals participating in the meeting included the following:

Robert G. Berns	Project II Coordinator
James R. Gleason	Interim Director
Vicki E. Shell	Research Associate (Project I)
Betty H. Turner	Project II Coordinator
Dr. Neal E. Vivian	University Liaison
Dr. Terry M. Williams	Project II Director

Executive Committee

Efforts of the task force were augmented through review by the IDECC Executive Committee. Subsequent to their review and modification, the committee adopted the attached recommendations. Members of the Executive Committee included the following:

Dr. Mary Anderton	Memphis State University	Tennessee
Ms. M. Catherine Ashmore	Ohio State University	Ohio
Dr. Leroy Buckner	Florida Atlantic University	Florida
Mr. Gene Callahan	State Dept. of Education	Alabama
Ms. Blanche Curran	Department of Education	Pennsylvania
Dr. Roger Ditzenberger	University of Northern Iowa	Iowa

Mission

Based upon the initial list of concerns/objectives approved by the Executive Committee, and additional input provided by the IDECC staff, a mission statement was developed. Assumptions as to the role of IDECC, relative to the purpose of the task force, were made as follows:

> The role of IDECC is to develop and disseminate systematic approaches for planning, organizing, directing and evaluating distributive education curricula for specific occupations in marketing and distribution. Further, IDECC curricula will be competency-based--including materials for testing, content documents, learning activities, behavioral objectives and related support materials.

Members were charged with the responsibility identified below. In addition, individuals were encouraged to modify the specific items as necessary, keeping within the basic mission of the task force.

> The mission of the curriculum development task force is to critique existing IDECC materials and related curriculum development processes to recommend guidelines for future developmental efforts--including such items as:
>
> A) Components, organization, and format of a LAP.
>
> B) Role of task statements, competency statements, terminal performance objectives, and enabling objectives.
>
> C) Referencing of resource materials.
>
> D) Field-testing and evaluation of curriculum materials.
>
> E) Occupational scope.
>
> F) Purposes (depth) and procedures for task inventory.
>
> G) Relation of adult/post secondary/special needs/secondary programs.

Evaluation

Prior to the development of recommendations, task force members were asked to generate, individually, a list of strengths and weaknesses inherent in the IDECC system. Individual lists were synthesized and are included in the appendix.

Recommendations

Following discussion of relative strengths and weaknesses, the task force unanimously adopted the following resolution:

> Whereas one of the objectives of the curriculum development task force is to recommend guidelines for future IDECC developmental efforts, it is suggested that the Executive Committee of the Board of Directors consider the following action to assure achievement and continuity of purpose.
>
> 1. Initiate action to reach consensus among consortium states on the philosophy to which IDECC members subscribe.
>
> 2. Develop and make available to consortium states a series of competency-based instructional modules reflecting IDECC philosophy and competency-based instructional procedures for pre-service and in-service education.

3. Involve the Board of Directors in the development of a plan to insure that member states develop and maintain strong commitment and support for the Consortium.

4. Involve the Board of Directors in the development and updating of long-range goals to provide direction for future IDECC developmental efforts.

The need for specific recommendations, of an operational nature, was recognized. In an effort to provide usable guidelines for future developmental efforts, the task force agreed to address a series of questions generated by the IDECC staff. These were clustered according to the items identified in the mission statement. The following recommendations are organized in a similar manner, and represent the recommendations adopted by the IDECC Executive Committee:

A. LAP Components, Organization, and Format.

A.1. A LAP should consist of a series of component parts (as identified in A.1.2) directed toward the achievement of competencies and objectives.

A.1.1 A LAP may consist of one or more competencies.

A.1.2 Existing LAP components are usable and adequate (i.e., pre-test, learning activities, handouts, learning manager's guide, post-test, test keys, and other related materials). No additions or deletions are recommended.

A.1.3 The loose-leaf format, currently being used, should be continued.

A.1.4 LAPs should be clustered into one of the existing curriculum sections or additional curriculum sections as appropriate.

A.2 Revised LAPs will consist of student-oriented materials; teacher-oriented items will be packaged separately.

A.2.1 Student materials should consist of the (1) cover page, (2) pre-test, (3) learning activities, and (4) hand-outs.

A.2.2 Learning manager guides should be three-hole punched and separate from the student materials.

A.2.3 Test keys should be three-hole punched and separate from the student materials.

A.2.4 Post-tests should be three-hole punched and separate from the student materials.

A.3 Efforts should be made to assure that pre- and post-tests adequately measure the objective(s) intended.

A.3.1 Formalized procedures for assuring validity and reliability should be adopted.

A.3.2 A suggested criterion level should be included in the LMG and test key. It should be noted that criterion levels reflect opinion rather than formal research and are, therefore, subject to local interpretations and/or considerations.

A.3.3 Pre- and post-tests should be written to cover all objectives within the LAP, with items clustered according to the objectives.

A.4 Test keys should be revised as needed to assure accuracy and completeness.

A.4.1 Rating sheets should be developed for objectives which are not easily measured with objective test items (i.e., for skill or attitudinal objectives) and/or for subjective test questions where appropriate.

A.4.2 Model answers or key-point outlines should be developed for oral or essay test questions.

A.4.3 Where appropriate, the rationale for test answers should be included with the key (i.e., why is "A" more acceptable the "B", "C", or "D"?).

A.5 Four learning activities (minimum) should be included for each objective or cluster of objectives.

A.5.1 At least one activity must be either self-contained or simulated.

A.5.1.1 A self-contained activity is one in which all necessary materials are included within the LAP.

A.5.1.2 A simulated activity uses only those resources commonly found in a D.E. laboratory for "project" type purposes.

A.5.2 Learning activities should be varied to accomodate the individual needs of students.

A.5.3 Learning activities specific to occupational areas should be written only as necessary and then clearly identified within the LAP.

A.5.4 Learning activities for continuing (on-going) objectives--e.g., exhibit positive attitude toward...--should include ideas for student contracts, performance charts, continuing items on the training plan, etc.

A.5.5 Learning activities should be presented in a step-by-step format including appropriate levels of the learning domain. (see B.1.3.2.)

A.5.6 Learning activities may be designed to develop one or more objectives within the LAP.

A.6 Competencies should be sequenced within curriculum sections, when possible, from simple to complex, on both the student competency record (SCR) and the computer matrix.

B. Role of Task Statements, Competency Statements

B.1 Objectives should be developed as in the existing LAPs.

B.1.1 Affective domain should be included only when identified by industry as critical to performance.

B.1.2 The objectives(s) for each series of learning activities should be identified at the top of the learning activities page.

B.1.3 Objectives should be written to the highest level of expected learning outcomes.

B.1.3.1 Additional lower level objectives may be included, at the writer's discretion, at lower levels within the learning domain.

B.1.3.2. Learning activities must develop the appropriate level of the learning domain. That is, if the objective is of a higher order, the learning activity must adequately build to that level.

C. Referencing of Resource Materials

C.1 Use of outside resource materials should be restricted to those meeting specific criteria established by IDECC.

C.2 The use of outside resources should be of an optional nature, although it is recognized that in certain specific cases a fully self-contained LAP may not be feasible.

C.3 Resources should be referenced into learning activities by topic and page number reference.

C.4 Commercial publishers should be encouraged to cross-reference their materials with IDECC.

C.5 IDECC should direct efforts to the development of student-oriented resource materials (e.g., audio-visuals, case studies, etc.) referenced to specified LAPs. Commercial and other materials, available at similar costs, should not be duplicated.

D. Field Testing and Evaluation of LAPs.

D.1 All new LAPs should be field-tested prior to dissemination.

D.2 Geographical representation should be a factor in determining field test sites, with a minimum of three states participating.

D.3 Field test sites should be identified by the IDECC representative within respective member states.

D.3.1 Field testers identified should be regular users of IDECC materials.

D.3.2 The state IDECC representatives, or other designated personnel should accept supervisory responsibility for field-testing within the respective state. Responsibility includes assurance of the validity of the field test--to include in-service training and/or on site visitation as deemed appropriate.

D.3.3 Specific guidelines will be developed by the IDECC staff.

D.4 Field testing should include measurement of both teacher and student attitudes with appropriate (IDECC) staff-developed instruments.

E. Occupational Scope

E.1 In determining priorities for the expansion of occupations included in IDECC, consideration should be given to current manpower figures and trends, input from industry, and possible availability of funding.

E.1.1 Above considerations are appropriate for identification of both new occupational clusters and for additional jobs within existing clusters.

E.1.2 Priority should be given to the development of representative jobs within a variety of different taxonomies (as opposed to the total development of individual taxonomies). Long-range plans should include expansion of occupations within the taxonomy.

E.1.3 In determining priorities, consideration should be given to the use of a career ladder concept which builds from basic entry level through entrepreneurship.

E.2 Occupations should be clustered according to the U.S.O.E. Instructional Program Codes (as opposed to the current identification of department store, variety store, etc.).

E.3 Mutual cooperation and communication is encouraged with other organizations (e.g., NADET, NASSDE, NADELS, CDTE, DECA).

E.3.1 It is recognized theat IDECC and DECA may choose to identify different occupational priorities.

E.3.2 To facilitate effective long-range planning, it is recommended that a representative of DECA be invited to sit, ex-officio, on the IDECC Executive Committee, when appropriate.

E.4 Long range plans should reflect current Federal guidelines.

E.4.1 Materials and plans should be reviewed to assure compliance with guidelines.

E.4.2 It is recommended that a U.S.O.E. representative be invited to sit, ex-officio, on the IDECC Executive Committee, when appropriate.

F. Purposes (Depth) and Procedures for Task Inventory.

F.1 It is recommended that IDECC adopt a modified version of the Center for Vocational Education's "Performance Content for Job Training," (Ammerman and Essex, The Center for Vocational Education, The Ohio State University, 1977) with specifications and exceptions as noted in the section (F). (See appendix)

F.2 A minimum of five states should be included in the identification of task inventory sites, considering the need for geographical representation and appropriate range of both business and community sizes.

F.3 In the development of task inventory lists, efforts should be made to assure that lists are complete and current.

F.3.1 An industry advisory committee should be used in development of the task list.

F.3.2 Additional consideration should be given to the following:

1) Available V-TECS lists
2) Literature search
3) Military materials
4) Task Inventory Exchange (Center for Vocational Education)
5) Crawford study
6) Other available information

F.3.3 Use of equipment, as appropriate, should be included in the task inventory.

F.4 It is recommended that member states assume responsibilities for assisting in the administration of task surveys.

F.4.1 The state IDECC representative, or other designated personnel, should serve as the contact person for task analyses within the respective state.

F.4.2 It is recommended that local teachers and collegiate DECA members be encouraged to participate in the administration of task inventory surveys as coordinated by the state representative and/or teacher educators.

F.5 Efforts should be made to identify incentives to encourage return of surveys. Possibilities include:

1) Recognition in print (e.g., newsletter, appropriate materials, etc.)
2) Encouragement of industry to sponsor "company-time" participation
3) Involvement of trade associations
4) Letters to state supervisors
5) Recognition at state conferences
6) IDECC payment for returns

G. Relation of Secondary, Adult, Post-Secondary, Special Needs, and Other Audiences.

G.1 The IDECC system should be developed to allow adequate flexibility for implementation with a wide variety of audiences.

G.2 Specific consideration should be given to serving each of the following:

1) Secondary
2) Adult
3) Post-Secondary
4) Special Needs

G.3 IDECC should assume additional responsibility for the development of career exploration materials applicable to occupations in IDECC. Priority, however, should remain with occupational development materials.

G.3.1 Consideration should be given to career exploration at all educational levels.

G.3.2 Consideration should be given to development of a bibliography of career exploration materials, applicable to occupations in IDECC.

APPENDIX B

Format of Task Booklet for Employee
(Eight Pages from Worker's Booklet for Stockperson)

LIST OF ACTIVITIES OF STOCKPERSON

(Booklet for Stockperson)

1978

This List of Activities is intended for research purposes. It is not doctrinal or directive in nature, but it is intended to include all activities of any significance which might be performed by most Stockpersons as part of their job.

The Task Inventory Questionnaires, of which this List of Activities is a part, is being administered in a research project of:

THE INTERSTATE DISTRIBUTIVE EDUCATION
CURRICULUM CONSORTIUM
Ohio State University
Columbus, Ohio 43210

TASK INVENTORY QUESTIONNAIRE

INTRODUCTION

You are requested to participate in providing information about the job of Stockperson. In combination with the responses of many other experienced workers and supervisors, your answers to questions on the Task Inventory Questionnaire will help determine very specifically what job activities now are a part of the work of Stockperson.

As an individual experienced with the day-to-day functions and work requirements of Stockperson, either as a worker or as a supervisor, your assistance is most essential. You are asked to provide some of the detailed information that is necessary to systematically identify the performance content of the occupation as it occurs in different employment settings. This will make it possible to plan more useful and realistic training programs and occupational descriptions..

Should there be any particular items you prefer not to answer, you are certainly free to omit those items. However, your consideration of each of these items is most important to the effective accomplishment of this occupational study. We need your judgments and knowledge of the work situation as it actually exists. PLEASE BASE YOUR ANSWERS ON YOUR EXPERIENCE WITH THE WORK DONE BY A STOCKPERSON. Composites of a larger number of responses from all over the country will be used; the answers of any one person will never be reported. Thus, your participation will serve to provide a representative sample of the work as it occurs nationwide.

Most of the activities (or tasks) performed by a stockperson are listed in this booklet. While not all stockpersons will do all these activities, this listing should include nearly all of the job activities performed by any one person. If you note that some activities are missing from the listing, please write them in this booklet or on a separate paper. Turn in these additions along with your completed questionnaire booklet.

Be sure you have answered the Background Information Sheet and the section for your comments and suggestions.

THANK YOU FOR YOUR COOPERATION.

(Use this sheet if you are a Stockperson, not a Supervisor of Stockperson)

INSTRUCTIONS: Please check the box opposite the one item in each section that most appropriately describes your experience.

WHAT IS YOUR JOB POSITION? (check the one that is most descriptive, regardless of actual job title used in your business)

☐ Stockperson

☐ Other (please write in): _____

_____

____ HOW MANY EMPLOYEES WORK IN THE LOCATION WHERE YOU ARE? (Enter number)

SPECIFY LOCATION, SUCH AS DEPARTMENT OR DIVISION (Please write in) _____

INSTRUCTIONS: Please write in the blanks the number of years of work experience for each of the following questions:

____ HOW MANY YEARS HAVE YOU WORKED AT YOUR PRESENT JOB? (Enter number)

____ HOW MANY YEARS HAVE YOU WORKED IN DEPARTMENT STORE RETAILING? (Enter number)

WHERE DID YOU RECEIVE MOST OF YOUR TRAINING TO QUALIFY AS A STOCKPERSON? (check the ones most appropriate)

- ☐ Senior High School (secondary)
- ☐ Technical Institute or Area Vocational-Technical
- ☐ Community or Junior College
- ☐ Two-year Branch College
- ☐ Equipment Manufacturer's Training Program
- ☐ On the Job (Self Learned)
- ☐ Previous Work Experience in Other Types of Jobs
- ☐ Public Vocational School (secondary)
- ☐ Community Manpower Development Program
- ☐ Private Business, Trade, or Technical School or College
- ☐ Senior College or University
- ☐ Employer-Sponsored Training Program
- ☐ Formal Apprenticeship Program
- ☐ Correspondence Courses
- ☐ Other (please write in): _____

_____

QUESTION 3 - "Extent Task is Part of the Position"

DIRECTIONS FOR REPORTING HOW MUCH EACH TASK IS A PART OF YOUR JOB

(Please read these pages carefully and completely)

---

1. **Answer this question so as to give the best description you can of what you do in your present job. For each task statement in the list of Activities consider how significant a part of your job it is. This may be done in two steps:**

   First, consider whether the activity is a part of your job. If your answer is NO, then the task item is definitely not part of your position.

   Second, and only if the item does apply to your job, decide how significant a part of your position it represents.

2. **Be sure to read every activity listed. Do not depend on the duty labels that are used to group the activities. These duty categories are not definite. They may contain some of your job activities, even when you do not generally perform the duty itself.**

3. **Circle the appropriate answer to the right of each activity statement. Please make a rating for every item listed in the booklet.**

4. **For each item, choose a value between 0 and 7 according to the following rating scale:**

0 = Definitely *not a part* of my job position, does not apply, or is not true for this job.
1 = Under unusual circumstances may be a *minor part* of my job.
2
3
4 = A *substantial part* of my job.
5
6
7 = A *most significant part* of my job.

Use all eight scale values, as appropriate. The ratings of "2" and "3" represent intermediate levels between "MINOR" and "SUBSTANTIAL" parts of the job. Similarly, the ratings of "5" and "6" represent intermediate levels between extent to which a task is considered part of the job. Your rating of a task might be at any one of these levels.

NOW TURN TO PAGE 1 OF THE ACTIVITIES LIST AND BEGIN
MARKING THE APPROPRIATE CHOICES IN THE SPACE PROVIDED

Thank you for your participation in this study

Listed below are tasks that may be performed on your job. Circle the number which accurately reports how much you consider each task to be a part of your job.

KEY TO ABBREVIATIONS

0= Definitely not a part of my job position, does not apply, or not true for this job.
1= Under unusual circumstances may be a minor part of my job.
2
3
4= A substantial part of my job.
5
6
7= A most significant part of my job.

ADVERTISING	Circle one category.
1. Allocate advertising space to departments.	0 1 2 3 4 5 6 7
2. Analyze the relative cost of advertising in various media.	0 1 2 3 4 5 6 7
3. Answer customer questions concerning advertised merchandise.	0 1 2 3 4 5 6 7
4. Check advertising proofs for omissions and for necessary corrections and additions.	0 1 2 3 4 5 6 7
5. Compare in-the-store sales promotion activities with national or chain advertising.	0 1 2 3 4 5 6 7
6. Consult with display personnel to coordinate promotional activities.	0 1 2 3 4 5 6 7
7. Consult with newspaper advertising departments to develop advertisements.	0 1 2 3 4 5 6 7
8. Contract with newspaper advertising departments to develop advertisements.	0 1 2 3 4 5 6 7
9. Design advertising insert for mailings.	0 1 2 3 4 5 6 7
10. Design seasonal catalog.	0 1 2 3 4 5 6 7
11. Design special events catalog.	0 1 2 3 4 5 6 7
12. Determine advertising policy.	0 1 2 3 4 5 6 7
13. Determine merchandise to be advertised.	0 1 2 3 4 5 6 7
14. Determine special event for store-wide promotion.	0 1 2 3 4 5 6 7
15. Determine type face (style) for advertisement.	0 1 2 3 4 5 6 7
16. Develop advertisement layout.	0 1 2 3 4 5 6 7
17. Distribute advertisements (tear sheets) in store.	0 1 2 3 4 5 6 7
18. Distribute free samples of merchandise.	0 1 2 3 4 5 6 7

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

O+: never performed, but might
Y-: much less often than once per year
1Y: one or more times per year
1M: one or more times per month
1W: one or more times per week
1D: once per day, on the average
D+: several times each day

1. Adding Machine	O+	Y-	1Y	1M	1W	1D	D+
2. Bags and boxes for merchandise	O+	Y-	1Y	1M	1W	1D	D+
3. Belt conveyer system	O+	Y-	1Y	1M	1W	1D	D+
4. Calculator	O+	Y-	1Y	1M	1W	1D	D+
5. Carpenter equipment	O+	Y-	1Y	1M	1W	1D	D+
6. Cash register (Non-computerized)	O+	Y-	1Y	1M	1W	1D	D+
7. Charge plate producing machine	O+	Y-	1Y	1M	1W	1D	D+
8. Computers	O+	Y-	1Y	1M	1W	1D	D+
9. Computer reports	O+	Y-	1Y	1M	1W	1D	D+
10. Crates and cartons	O+	Y-	1Y	1M	1W	1D	D+
11. Credit application forms	O+	Y-	1Y	1M	1W	1D	D+
12. Credit authorization computer	O+	Y-	1Y	1M	1W	1D	D+
13. Credit bureau terminal	O+	Y-	1Y	1M	1W	1D	D+
14. Credit card stamper	O+	Y-	1Y	1M	1W	1D	D+
15. Credit explanation folder (pamphlets)	O+	Y-	1Y	1M	1W	1D	D+
16. Customer credit books	O+	Y-	1Y	1M	1W	1D	D+
17. Delivery trucks (e.g. 2-wheel dolly)	O+	Y-	1Y	1M	1W	1D	D+
18. Department identification tags	O+	Y-	1Y	1M	1W	1D	D+
19. Display backdrops	O+	Y-	1Y	1M	1W	1D	D+
20. Display racks	O+	Y-	1Y	1M	1W	1D	D+
21. Drawing board and equipment	O+	Y-	1Y	1M	1W	1D	D+

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

O+: never performed, but might
Y-: much less often than once per year
1Y: one or more times per year
1M: one or more times per month
1W: one or more times per week
1D: once per day, on the average
D+: several times each day

22. Duplicating machine	O+	Y-	1Y	1M	1W	1D	D+
23. Filing equipment	O+	Y-	1Y	1M	1W	1D	D+
24. Freight elevator	O+	Y-	1Y	1M	1W	1D	D+
25. Garment pressing equipment	O+	Y-	1Y	1M	1W	1D	D+
26. Mannequins	O+	Y-	1Y	1M	1W	1D	D+
27. Merchandise order forms	O+	Y-	1Y	1M	1W	1D	D+
28. Merchandise traffic book	O+	Y-	1Y	1M	1W	1D	D+
29. Microfilming equipment	O+	Y-	1Y	1M	1W	1D	D+
30. Paints and brushes	O+	Y-	1Y	1M	1W	1D	D+
31. Paper and board (of various weights, display)	O+	Y-	1Y	1M	1W	1D	D+
32. Personnel planning book	O+	Y-	1Y	1M	1W	1D	D+
33. Photography equipment	O+	Y-	1Y	1M	1W	1D	D+
34. Pneumatic tubes	O+	Y-	1Y	1M	1W	1D	D+
35. Point-of-sale terminal (computerized cash register)	O+	Y-	1Y	1M	1W	1D	D+
36. Price change books	O+	Y-	1Y	1M	1W	1D	D+
37. Price change clippers	O+	Y-	1Y	1M	1W	1D	D+
38. Price lists	O+	Y-	1Y	1M	1W	1D	D+
39. Procedures manual	O+	Y-	1Y	1M	1W	1D	D+
40. Sales check book	O+	Y-	1Y	1M	1W	1D	D+
41. Saws	O+	Y-	1Y	1M	1W	1D	D+

Refer to Chapter II for complete equipment and material list.

THANK YOU FOR YOUR COOPERATION - NOW WE WOULD LIKE TO GET YOUR REACTION:

This page provides an opportunity for you to give us your comments and suggestions. Your judgment and recommendations will be important information for our evaluation of this survey of job performance activities. Feel free to comment at any point.

Please read each of the seven statements below. Circle the symbol on the right which best describes your feelings about each statement. These symbols are defined as follows:

SA = Strongly Agree

A = Agree

U = Undecided

D = Disagree

SD = Strongly Disagree

1. The description of the occupation being surveyed seemed to include most of my present job assignment.	SA	A	U	D	SD
2. The general form of the questionnaire seemed reasonably simple and easy to complete.	SA	A	U	D	SD
3. I feel reasonably certain that my ratings indicate fairly accurately what I do on my job.	SA	A	U	D	SD
4. I found it reasonably easy to think of my work in terms of the tasks listed in the questionnaire.	SA	A	U	D	SD
5. The instructions for answering the questions about each task were reasonably clear and understandable.	SA	A	U	D	SD
6. The statements of the work tasks were reasonably clear and accurate, at least for the ones that are part of my job.	SA	A	U	D	SD
7. This survey seems to be a good way to describe what workers do in this occupation.	SA	A	U	D	SD

Please recommend any improvements or corrections for this survey questionnaire in the space below.

APPENDIX C

Format of Task Booklet for Supervisor
(Eight Pages from Supervisor's Booklet for Stockperson)

LIST OF ACTIVITIES OF STOCKPERSON

(Booklet for Supervisor of Stockperson)

1978

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INTRODUCTION

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As an individual experienced with the day-to-day functions and work requirements of Stockperson, either as a worker or as a supervisor, your assistance is most essential. You are asked to provide some of the detailed information that is necessary to systematically identify the performance content of the occupation as it occurs in different employment settings. This will make it possible to plan more useful and realistic training programs and occupational descriptions..

Should there be any particular items you prefer not to answer, you are certainly free to omit those items. However, your consideration of each of these items is most important to the effective accomplishment of this occupational study. We need your judgments and knowledge of the work situation as it actually exists. PLEASE BASE YOUR ANSWERS ON YOUR EXPERIENCE WITH THE WORK DONE BY A STOCKPERSON. Composites of a larger number of responses from all over the country will be used; the answers of any one person will never be reported. Thus, your participation will serve to provide a representative sample of the work as it occurs nationwide.

Most of the activities (or tasks) performed by a stockperson are listed in this booklet. While not all stockpersons will do all these activities, this listing should include nearly all of the job activities performed by any one person. If you note that some activities are missing from the listing, please write them in this booklet or on a separate paper. Turn in these additions along with your completed questionnaire booklet.

Be sure you have answered the Background Information Sheet and the section for your comments and suggestions.

THANK YOU FOR YOUR COOPERATION.

(Use this sheet if you are a SUPERVISOR of Stockperson)

INSTRUCTIONS: Please check the box opposite the one item in each section that most appropriately describes your experience.

WHAT IS YOUR PRESENT JOB POSITION? (check the one that is most descriptive, regardless of actual job title used in your business)

- ☐ Department Manager
- ☐ Area Head of Stock
- ☐ Other (please write in): _____

____ HOW MANY EMPLOYEES WORK IN THE LOCATION WHERE YOU ARE? (Enter number)

SPECIFY LOCATION, SUCH AS DEPARTMENT OR DIVISION (Please write in) _____

INSTRUCTIONS: Please write in the blanks the number called for in each of the following questions:

____ ABOUT HOW MANY TOTAL YEARS OF EXPERIENCE DO YOU HAVE DIRECTLY SUPERVISING THE WORK OF STOCKPERSON? (Enter number)

____ ABOUT HOW MANY RECENT GRADUATES OF JOB TRAINING PROGRAMS DID YOUR IMMEDIATE ORGANIZATION HIRE LAST YEAR FOR THIS OCCUPATION? (Enter number)

DIRECTIONS FOR REPORTING WHICH ACTIVITIES SHOULD BE PERFORMED AS PART OF THE JOB and WHERE EACH ACTIVITY SHOULD BE LEARNED

(Please read this page carefully and completely)

1. From your experience as a supervisor of one or more persons in this position indicate which of the activities in the List of Activities should be performed by these workers in your operation; that is, by such employees under your supervision in your office or firm. Place a check mark or "X" in the column to the right of each activity statement to indicate which tasks your workers should be doing as part of their job, even if only done once. Task activities not part of the job for any of your workers should be left blank.

2. Be sure to read every activity listed. Do not depend on the duty labels that are used to group the activities. These duty categories are not definite. They may contain some relevant job activities, even when the duty itself is not generally performed.

3. Do include as part of the job:
   a. Activities that your workers occasionally are expected to do, but that are not normally part of their job.
   b. Activities that are to be performed by only one of your staff of this position even if they are not part of every worker's job.

4. Do not mark activities:
   a. If done only by other types of job positions in your office
   b. If your workers only lend occasional assistance to another worker performing a task, and are not responsible for the effective performance of that task.

5. Do not rate your own job; rate only the work of workers in this position that you supervise.

6. In answering this question of which activities should be performed by a worker in this position in your office, pay particular attention to the "action verb." The "action verb" is usually the first word of each statement about a worker in this position worker unless the "action verb" implies supervision as a part of this worker's activity.

7. The pages of the Task Inventory booklet should not be removed when answering this question; they will need to be in proper sequence later to process your answers along with those of other people answering this question.

WHERE EACH ACTIVITY SHOULD BE LEARNED

1. From your total experience in employing and supervising persons in this position, judge where each job activity that you checked on Question 2 should be learned. That is, where should a worker make the main effort to learn what needs to be known about each expected activity?

2. This judgment should take into consideration where it is most useful, most feasible, and most practical for such learning to occur, under realistic circumstance. Do not let your judgment be overly influenced by the location or nature of such training that you or your workers may have received. Instead, decide where you feel the training would best be accomplished for future persons wanting to become qualified in positions like those in your office.

3. Circle the appropriate answer to the right of each activity. Use that category which best represents where you feel the main learning effort should be located for that activity. Do not give answers for activities you haven't checked in the booklet as appropriate. Please mark an answer for all others.

4. Choose your answers from the following categories:

P = PRIOR to enrollment in a formal job training program (such as in grade school, at home, or in other instructional programs).

T = In a formal TRAINING program or school, before regular employment in the job.

S = On SITE (such as by job experience after employment, on-the-job training, apprenticeship, self-training, or in local training courses after employment as a

E = Through prior employment EXPERIENCE *in a related or lower entry occupation* (but *not* experience in other positions).

O = OTHER: (Please *write* your judgment of the proper learning location on the *reverse* side of the answer page, indicating the item number).

N = There is NOTHING of any real substance that new would need to learn about

thank you for your participation in this study.

NOW TURN TO PAGE 1 OF THE ACTIVITIES LIST AND BEGIN MARKING THE APPROPRIATE CHOICES IN THE SPACE PROVIDED.

Listed below are tasks performed by workers you supervise. In the box provided, check all tasks which should be performed by the workers in the occupation specified on page 2 of this booklet. Add any tasks that are not listed. After you have finished all the statements, then go back and circle the one category that indicates where the workers should learn how to perform the task.

KEY TO ABBREVIATIONS:

- P= PRIOR to enrollment in a formal job training program (such as in grade school, at home, or in other instructional programs).
- T= In a formal TRAINING program or school, before regular employment in the job.
- S= On SITE (such as by job experience after employment, on-the-job training, apprenticeship, self-training, or in local training courses after employment).
- E= Through prior employment EXPERIENCE in a related or lower entry occupation (but not experience in this position).
- O= OTHER: (Please write your judgement of the proper learning location on the reverse side of the answer page, indicating the item number).
- N= . There is NOTHING of any real substance that needs to be learned about the activity.

ADVERTISING

1. Allocate advertising space to departments.	☐	P T S E O N
2. Analyze the relative cost of advertising in various media.	☐	P T S E O N
3. Answer customer questions concerning advertised merchandise.	☐	P T S E O N
4. Check advertising proofs for omissions and for necessary corrections and additions.	☐	P T S E O N
5. Compare in-the-store sales promotion activities with national or chain advertising.	☐	P T S E O N
6. Consult with display personnel to coordinate promotional activities.	☐	P T S E O N
7. Consult with newspaper advertising departments to develop advertisements.	☐	P T S E O N
8. Contract with newspaper advertising departments to develop advertisements.	☐	P T S E O N
9. Design advertising insert for mailings.	☐	P T S E O N
10. Design seasonal catalog.	☐	P T S E O N
11. Design special events catalog.	☐	P T S E O N
12. Determine advertising policy.	☐	P T S E O N
13. Determine merchandise to be advertised.	☐	P T S E O N
14. Determine special event for store-wide promotion.	☐	P T S E O N
15. Determine type face (style) for advertisement.	☐	P T S E O N
16. Develop advertisement layout.	☐	P T S E O N
17. Distribute advertisements (tear sheets) in store.	☐	P T S E O N
18. Distribute free samples of merchandise.	☐	P T S E O N

EQUIPMENT AND MATERIALS

What equipment and materials do you use in your job? Please indicate which of the following abbreviations best describes the frequency of use.

O+: never performed, but might
Y-: much less often than once per year
1Y: one or more times per year
1M: one or more times per month
1W: one or more times per week
1D: once per day, on the average
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1. Adding Machine	O+	Y-	1Y	1M	1W	1D	D+
2. Bags and boxes for merchandise	O+	Y-	1Y	1M	1W	1D	D+
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4. Calculator	O+	Y-	1Y	1M	1W	1D	D+
5. Carpenter equipment	O+	Y-	1Y	1M	1W	1D	D+
6. Cash register (Non-computerized)	O+	Y-	1Y	1M	1W	1D	D+
7. Charge plate producing machine	O+	Y-	1Y	1M	1W	1D	D+
8. Computers	O+	Y-	1Y	1M	1W	1D	D+
9. Computer reports	O+	Y-	1Y	1M	1W	1D	D+
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15. Credit explanation folder (pamphlets)	O+	Y-	1Y	1M	1W	1D	D+
16. Customer credit books	O+	Y-	1Y	1M	1W	1D	D+
17. Delivery trucks (e.g. 2-wheel dolly)	O+	Y-	1Y	1M	1W	1D	D+
18. Department identification tags	O+	Y-	1Y	1M	1W	1D	D+
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20. Display racks	O+	Y-	1Y	1M	1W	1D	D+
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EQUIPMENT AND MATERIALS

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1D: once per day, on the average
D+: several times each day

22. Duplicating machine	O+	Y-	1Y	1M	1W	1D	D+
23. Filing equipment	O+	Y-	1Y	1M	1W	1D	D+
24. Freight elevator	O+	Y-	1Y	1M	1W	1D	D+
25. Garment pressing equipment	O+	Y-	1Y	1M	1W	1D	D+
26. Mannequins	O+	Y-	1Y	1M	1W	1D	D+
27. Merchandise order forms	O+	Y-	1Y	1M	1W	1D	D+
28. Merchandise traffic book	O+	Y-	1Y	1M	1W	1D	D+
29. Microfilming equipment	O+	Y-	1Y	1M	1W	1D	D+
30. Paints and brushes	O+	Y-	1Y	1M	1W	1D	D+
31. Paper and board (of various weights, display)	O+	Y-	1Y	1M	1W	1D	D+
32. Personnel planning book	O+	Y-	1Y	1M	1W	1D	D+
33. Photography equipment	O+	Y-	1Y	1M	1W	1D	D+
34. Pneumatic tubes	O+	Y-	1Y	1M	1W	1D	D+
35. Point-of-sale terminal (computerized cash register)	O+	Y-	1Y	1M	1W	1D	D+
36. Price change books	O+	Y-	1Y	1M	1W	1D	D+
37. Price change clippers	O+	Y-	1Y	1M	1W	1D	D+
38. Price lists	O+	Y-	1Y	1M	1W	1D	D+
39. Procedures manual	O+	Y-	1Y	1M	1W	1D	D+
40. Sales check book	O+	Y-	1Y	1M	1W	1D	D+
41. Saws	O+	Y-	1Y	1M	1W	1D	D+

Refer to Chapter II for complete equipment and material list.

THANK YOU FOR YOUR COOPERATION - NOW WE WOULD LIKE TO GET YOUR REACTION:

This page provides an opportunity for you to give us your comments and suggestions. Your judgment and recommendations will be important information for our evaluation of this survey of job performance activities. Feel free to comment at any point.

Please read each of the seven statements below. Circle the symbol on the right which best describes your feelings about each statement. These symbols are defined as follows:

SA = Strongly Agree

A = Agree

U = Undecided

D = Disagree

SD = Strongly Disagree

1. The description of the occupation being surveyed seemed to include most of the expected job assignment tasks.	SA	A	U	D	SD
2. The general form of the questionnaire seemed reasonably simple and easy to complete.	SA	A	U	D	SD
3. I feel reasonably certain that my ratings indicate fairly accurately what I expect to be performed on the job.	SA	A	U	D	SD
4. I found it reasonably easy to think of this occupation's work requirements in terms of the tasks listed in the questionnaire.	SA	A	U	D	SD
5. The instructions for answering the questions about each task were reasonably clear and understandable.	SA	A	U	D	SD
6. The statements of the work tasks were reasonably clear and accurate, at least for the ones that are an expected part of the job.	SA	A	U	D	SD
7. This survey seems to be a good way to describe what workers do in this occupation.	SA	A	U	D	SD

Please recommend any improvements or corrections for this survey questionnaire in the space below.

APPENDIX D

Resources for Training LAP Writers

Resources for Training LAP Writers

Allen, David. Review and Analysis of Instructional Performance Objectives in Vocational Education Curriculum. Columbus, Ohio: ERIC Clearinghouse, 1973.

Baker, Robert L., and Schutz, Richard E., eds. Instructional Product Development New York: Reinholt, 1971.

Banathy, Bela H. Developing a Systems View of Education. Belmont, California: Lear Siegler, 1973.

Bloom, Benjamin S., ed. Taxonomy of Educational Objectives; Handbook I: Cognitive Domain. New York: David McKay Company, Inc., 1956.

Briggs, Leslie J. Handbook of Procedures for the Design of Instruction. American Institutes for Research, 1970.

Briggs, Leslie J. Students Guide to Handbooks of Procedures for the Design of Instruction. Belmont, California: Rearon, 1972.

Briggs, Leslie J. Sequencing of Instruction in Relation to Hierarchies of of Competence. American Institutes for Research, 1968.

Burns, Richrd W. New Approaches to Behavioral Objectives. Dubuque, Iowa: Brown, 1972.

Butler, F. Coit. Instructional Systems Development for Vocational and Technical Training. Englewood Cliffs, New Jersey: 1972.

Carver, Roald P. "Two Dimensions of Tests." American Psychologist. July, 1974, pp. 512-518.

Clark, D. Cecil. Using Instructional Objectives in Teaching. Glenview, Illinois: Scott, Foresman and Company, 1972.

Davies, Ivor K. Competency Based Learning: Technology, Management and Design. New York: McGraw-Hill, 1973.

Denton, William T. Student Evaluation in Vocational and Technical Education. Columbus, Ohio: Center for Vocational and Technical Education, The Ohio State University, 1973.

Dillman, Caroline Matheny and Rahmlow, Harold F. Writing Instructional Materials. Belmont, California: Fearon, 1972.

Espich, Jane E. and Williams, Bill. Developing Programmed Instructional Materials. Belmont, California: Fearon, 1972.

Franty, Nevin R. Jr., Individualized Instructional Systems for Vocational and Technical Education: A Collection of Readings. Athens, Georgia: Vocational Instructional Systems, 1974.

Gerlach, Vernon S. and Ely, Donald P. Teaching and Media, a Systematic Approach. New York: Prentice-Hall, 1971.

Gilchrist, Robert J. and Roberts, Bernice R. Curriculum Development: A Humanized Systems Approach. Phi Delta Kappa, 1974.

Glaser, Robert. The Design and Programming of Instruction.

Gottman, John Mordechai and Clasen, Robert Earl. Evaluation in Education. Itasca, Illinois: F. E. Peacock, Inc., 1972.

Gronlund, Norman E. Preparing Criterion-Referenced Tests for Classroom Instruction New York: Macmillan, 1973.

Gronlund, Norman E. Stating Behavioral Objectives for Classroom Instruction. London: Macmillan, 1970.

Harrow, Anita J. A Taxonomy of the Psychomotor Domain. New York: David McKay Company, Inc., 1972.

Hodges, Lewis H. How to Teach a Performance-Demonstration Lesson, Part II and III. Chicago: American Technical Society, 1969.

Huffman, Harry H. Writing Performance Goals; Strategy and Prototypes. Columbus, Ohio: Center for Vocational Technical Education, The Ohio State University.

Hyman, Ronald T. Ways of Teaching. New York: J. B. Lippencott Company, 1970.

Impellitteri, Joseph T. and Finch, Curtis R. Review and Synthesis of Research on Individualizing Instruction in Vocational and Technical Education. Columbus, Ohio: ERIC Clearinghous, 1971.

Jekel, Jerome R. and Johnson, Robert E. Techniques to Learning--25 Approaches.

Johnson, Stuart and Johnson, Rita B. Developing Individualized Instructional Material: A Self-Instructional Material in Itself. Palo Alto, California: Westinghous Learning Press, 1971.

Kapfer, Phillip G., and Ovard, Glen F. Preparing and Using Individualized Learning Packages for Ungraded, Continuous Progress Education. Englewood, Englewood Cliffs, New Jersey: Educational Technology Publications, 1972.

Kaufman, Roger A., Corrigan, Robert E., and Nunnelly, Charles L. "The Instructional System Approach to Training." Human Factors, April, 1966.

Kemp, Jerrald E. Instructional Design. Belmont, California: Fearon, 1971.

Kibler, Robert J., Barket, Larry L., and Miles, David T. Behavioral Objectives and Instruction. Boston: Allyn and Bacon, 1970.

Kirschenbaum, Howard, Napier, Rodney, and Simon, Sidney B. "Wad-ja-gat? The Grading Game in American Education." Hart, New York.

Klaus, David J. Instructional Innovation and Individualization. Pittsburgh: American Institute for Research, 1969.

Klingstedt, Joe Lars. Developing Instructional Modules for Individualized Learning." Educational Technology-Teacher and Technology Supplement, 11; 10; 73-74.

Krathwahl, David R., Bloom, Benjamin S., and Masia, Bertram B. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, 1968.

Liverette, Rudy. "Getting Clear About Behavioral Objectives." English Journal, March, 1974.

Mager, Robert F. Analyzing Performance Problems or "You Really Oughta Wanna", Belmont, California: Fearon, 1970.

Mager, Robert F. Goal Analysis, Belmont, California: Fearon, 1972.

Mager, Robert F. Measuring Instructional Intent, Belmont, California: Fearon, 1973.

Mager, Robert F. Preparing Instructional Objectives, Palo Alto, California: Fearon, 1975.

Mager, Robert F. and Beach, Jr., Kenneth M. Developing Vocational Instruction, Fearon, Belmont, California, 1967.

McAshan, H.H. The Goals Approach to Performance Objectives, W. B. Sounders Company, Philadelphia, 1974.

Performance-Based Teacher Education Modules: Columbus, Ohio: The Center for Vocational Education, 1977.

Popham, Estelle L., Schrag, Adele Frisbie, and Blacklus, Wand. A Teaching-Learning System for Business Education, McGraw-Hill, New York, 1975.

Popham, W. James. Criterion-Referenced Instruction, Fearon, Belmont, California, 1973.

Popham, W. James. The Uses of Instructional Objectives, A Personal Perspective, Fearon, Belmont, California, 1973.

Popham, W. James and Baker, Eva L., Classroom Instructional Tactics, Prentice-Hall, New Jersey, 1973.

Popham, W. James and Baker, Eva L. Establishing Instructional Goals, Prentice-Hall, New Jersey, 1970.

Popham, W. James. Evaluating Instruction, Prentice-Hall, New Jersey, 1973.

Popham, W. James and Baker, Eva L. Planning an Instructional Sequence, Prentice-Hall, New Jersey, 1970.

Popham, James and Baker, Eva L. Systematic Instruction, Englewood Cliffs: Prentice-Hall, 1970.

Smith, Clark A. CORD National Research Training Manual Workbook, 1969.

Smith, James E. "The Learning Activity Package (LAP)," Educational Technology, 12; 9; 15-17.

Smith, Robert G. The Engineering of Educational and Training Systems, Heath Lexinton, Toronto, 1971.

Terwilliger, James S. Assigning Grades to Students, Scott, Foresman & Co. Glenview, Illinois, 1971.

Valett, Robert E. Modifying Children's Behavior, Fearon, Belmont, California, 1969.

Vargas, Julie S. Writing Worthwhile Behavior Objectives, New York, 1972.

Whilhelms, Fred T. (ed.), Evaluation As Feedback and Guide, Washington, D.C.: Association for Supervision and Curriculum Development, 1967.

Writing Performance Goals Strategy and Prototypes; A Manual for Vocational and Technical Educators, Gregg/McGraw-Hill, 1974.

APPENDIX E

Basic Instructions to Writers of the IDECC LAPs

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BASIC INSTRUCTIONS TO WRITERS OF THE IDECC LAPS

1978

I. RECEIVE FROM IDECC:

A. Competency statements and objectives for which LAPs are to be written

B. Forms to be used when writing (there are four forms identified by letters)* and a copy of "A Model for Lap Development", IDECC, 1978

Form A contains:

1. Competency Area Abbreviation, such as--

M & E = marketing and economic concepts
AD = advertising
CM = communications
DSP = display
HR = human relations
MA = mathematics
MDS = merchandising
P & S = product and service technology
OP = operations
MGNT = management
SL = selling

2. LAP Title--

an abbreviation of key words contained in the competency statement used in an expressive fashion

For example, the competency statement, "Knowledge of what economics is and why it is important" is converted to the title, "The 'What' And 'Why' of Economics"

3. LAP Number--

indicates the order of placement of this particular LAP within the competency area

4. Author Initials--

write your initials in the space at the corner of the upper right side of the page

5. Competency Statement(s)--

represent the knowledges, attitudes, and skills to be learned by students

*Copies of Forms A, B, C, and D are attached

IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDECC IDEC

B. Form A, Continued:

6. Objective Statement(s)--

behaviors to be demonstrated by students are presented in ascending order from the simple to the more complex

Minimum criterion levels do not need to be stated in the objectives, but should be suggested in the test keys

Unique conditions critical to the performance of an objective should be stated, but the more common ones may be implied

7. Description--

At the bottom of Form A is a brief description of the contents of the LAP. This will often be a summarization of the competency statement(s).

Form B: LEARNING ACTIVITIES

1. Write the information requested in the appropriate spaces at the top of the page

--abbreviate the LAP title from Form A

--indicate if the learning activity series is the first or second (alternate) and if it is for individual or group learning by placing checkmarks in the appropriate spaces.

note: there should be learning activities for each objective, however, the activities may be combined to cover more than one objective concurrently. See page 2, "A Model for LAP Development", for an example of this.

2. Since there are at least two individual and two group series of activities for the objectives, you will be using a minimum of four copies of Form B for each LAP that you write.

The order in which the activity series should be written is:

Series I, Individual Activities (1st)
Series II, Individual Activities (2nd)
Series I, Group Activities (3rd)
Series II, Group Activities (4th)

--Series I must always contain "In-LAP" instructional materials; information sheets, work sheets, etc. for individual use and transparency originals, games, etc. for group activities

--Series II may contain "In-LAP" materials as well as outside references and resources such as: texts, filmstrips, films, resource persons, etc.*

3. Begin writing activities for the first objective(s) through the last ones being sure to identify them with corresponding objective letters. You may wish to review the activities on pages 2-5 in the developmental model before proceeding.

*When references are listed give the Title, Author(s), Publisher, Edition, and appropriate page numbers

B. Form B, Continued:

4. When writing the activities, be sure that they are congruent with and parallel to the objectives. For example, if an objective asks a student to define economics the learning activities should include activities to help the student do this and not such things as writing a thirty page dissertation on the benefits of capitalism or expounding on the characteristics of the labor market.

Form C: IN-LAP INSTRUCTIONAL MATERIALS

1. Complete the information requested at the top of the form

2. Develop the individual instructional materials first, then those needed for group use

3. Be sure to indicate the learning activity letter that the material relates to by checking appropriate spaces

4. Indicate the type of material that is being developed; i.e. game, simulation, information sheet, etc.

5. Title everything that you develop and write it in the appropriate space

6. Remember that the in-lap instructional materials need to be original--not taken directly from other references. Certainly ideas and concepts that you have seen may be applied, but be extremely careful not to use the same wording, etc.

Form D: EVALUATION MATERIALS

1. Complete information at the top of the form indicating if it is a pretest, posttest, or key

2. Each item on the test needs to correspond directly with a specific objective and letter

   When possible, the items on the pre and posttests should be written differently while maintaining the intents of the objectives. Look at page 9 of the developmental model. Notice that this is a pretest for objectives A, B, C, and D. The test item for objective A is labeled with the same letter and requires a student to identify "economics". On the next page, the posttest, requires this same thing for objective A. Note, however, that the items from which a student selects the best description of economics are different. Check the other items on the pretest and posttest to see how they compare.

4. Place the keys for the tests on the same page when possible (at final printing these will be separated, however). Include in the keys the suggested criterion levels for each item.

II. REVIEW THE MATERIALS YOU HAVE WRITTEN TO MAKE SURE THAT THE CONTENT IS CLEAR, READABLE, ETC.

III. NUMBER EACH OF THE PAGES IN THE UPPER RIGHT HAND CORNER, IF THIS HAS NOT YET BEEN DONE

IV. TURN IN YOUR MATERIALS TO THE PERSON IN YOUR STATE WHO HAS BEEN GIVEN THE RESPONSIBILITY FOR EVALUATING, EDITING, AND TYPING.

THE CONTRIBUTION THAT YOU HAVE MADE IS INVALUABLE TO THE CONTINUING PROGRESS OF IDECC

THANK YOU!

APPENDIX F

Forms to Use When Writing LAPs

AREA _____ LAP TITLE _____ AUTHOR INTLS._____
ABBR.

NO._____

COMPETENCIES

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

OBJECTIVES

A _____

_____

B _____

_____

C _____

_____

D _____

_____

E _____

_____

(continue on reverse side if necessary)

155

DESCRIPTION

_____

168 169

A

AREA_____ TITLE_____ NO._____ INTLS._____ PAGE_____
(abbr.) (abbr.) (LAP) (author)

LEARNING ACTIVITIES
SERIES: I ____ II____ (directions for) INDIVIDUAL____ GROUP____

OBJECTIVE LETTER(S): A____ B____ C____ D____ E____

AREA_____ TITLE_____ NO._____ INTLS_____ PAGE_____
(abbr.) (abbr.) (LAP) (author)

IN-LAP INSTRUCTIONAL MATERIALS

SERIES: I _____ II _____ INDIVIDUAL_____ GROUP_____

TYPE:_____TITLE:_____
(information sheet, transparency, etc) (or heading)

LEARNING ACTIVITY: A_____ B_____ C_____ D_____ E_____

AREA_____ TITLE_____ NO._____ INTLS_____ PAGE_____
(abbr.) (abbr.) (LAP) (author)

EVALUATION MATERIALS

PRETEST _____ POSTTEST _____ PRETEST KEY _____ POSTTEST KEY_____

OBJECTIVE LETTER(S): A_____ B_____ C_____ D_____ E_____

APPENDIX G

Evaluation Form for LAP Materials

EVALUATION FORM FOR LAP MATERIALS

160

IDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDeccIDecc

LAP TITLE _____ NO. _____ AUTHOR _____ STATE _____
(abbreviation) (initials)

1=good, meets standard; 2=needs minor revision; 3=needs to be rewritten			1	2	3
I. OBJECTIVE(S):		A			
		B			
		C			
		D			
		E			
II. DESCRIPTION:					
III. LEARNING ACTIVITY SERIES:	Individual (I)				
		A			
		B			
		C			
		D			
		E			
	Individual (II)				
		A			
		B			
		C			
		D			
		E			
	Group (I)				
		A			
		B			
		C			
		D			
		E			
	Group (II)				
		A			
		B			
		C			
		D			
		E			
IV. INSTRUCTIONAL MATERIALS:	Individual	(I)			
		(II)			
	Group	(I)			
		(II)			
V. EVALUATION MATERIALS:		PRETEST			
		POSTTEST			
		PRETEST KEY			
		POSTTEST KEY			

APPENDIX H

A Model for LAP Development

A MODEL FOR LAP DEVELOPMENT

THE 'WHAT' AND 'WHY' OF ECONOMICS

Prepared by

Karen C. Leonard

for the

Interstate Distributive Education
Curriculum Consortium

James R. Gleason
Interim Director

AN EXAMPLE OF THE TYPE OF INFORMATION AND ITS FORM
THAT WILL BE USED AS A BASIS FOR THE DEVELOPMENTAL ACTIVITIES OF THE IDECC LAPS

IDECC

1978 176

AREA M&E (ABBR.) LAP TITLE THE "WHAT" AND "WHY" OF ECONOMICS AUTHOR INTLS. kl

NO. 1

COMPETENCIES

-- Knowledge of what economics is and why it is important

OBJECTIVES

A From a listing of economic descriptions, identify the one that best defines economics

B Identify situations that represent economic activities

C Indicate why it is important to study economics

D In a short paragraph (three to six sentences), describe the economic activities that you have engaged in today

E

(continue on reverse side if necessary)

DESCRIPTION

Activities for developing a knowledge of "what" economics is and "why" it is important

SERIES: I X II

LEARNING ACTIVITIES (directions for)

INDIVIDUAL X GROUP

OBJECTIVE LETTER(S): A X B X C X D X E

A, B: Read "Economics Is" on page .

Study the questions at the bottom of the page.

What do you think? Do you think that you have a pretty good idea of how economics affects you and your everyday life?

If yes, move on to the next learning activity.

If no, talk with someone about these questions.

C: Read "Why Economics?", page .

Now try to answer these questions:

1. Is it possible for a person to avoid economics? Why?
2. What is meant by "prioritizing" needs and wants? Look for the word "prioritizing" in a dictionary and read its definition if you are not sure of its meaning.
3. What is meant by "limited" resources?
4. Why is it important to understand economics?

Reread "Why Economics?" to check your responses to these questions.

D: On a separate sheet of paper, list three things that you need or want (now or sometime in the future).

Beside each item, identify the resources that you will use to obtain it.

How do you plan to obtain the resources to satisfy these needs and/or wants?

AREA M&E (abbr.) TITLE What, Why Econ. (abbr.) NO. 1 (LAP) INTLS. kl (author) PAGE 3

LEARNING ACTIVITIES (directions for)

SERIES: I ____ II X INDIVIDUAL X GROUP ____

OBJECTIVE LETTER(S): A X B X C X D X E ____

A, B: Read pages 2-4 in "The American Economic system and your part in it", The Distributive Education Materials Lab, The Ohio State University, 1978

or

Pages 3, 4 and 18 in Economics Principals and Practices. Olsen, A.R., Kennedy, W., Southwestern Publishing Co., 9th Ed., 1978

or

Pages 1-3 in The Economics of Marketing, Klaurens, M.K., Gregg Division, McGraw Hill Book Co., 1978

C: Ask two people this question: "Why is it important to study economics?"

Now compare the answers that each person gave. Are the answers different? similar? the same?

Take these answers (along with the question) to an economics teacher at your school. Ask this person to evaluate the answers you received and to give you additional advice.

D: Think about the things you have done, are doing, or will be doing today.

Can you identify those things that are economic in nature?

See if you can answer these questions:

1. Is the decision to sleep late on Saturday morning an economic activity? Why or why not?
2. Is buying a loaf of bread an economic activity? Why?
3. What about mowing the grass in your yard? Is that an economic activity? Why?

Talk with someone about these questions.

If you are not sure of the answers you gave, ask this person to explain why each one is or is not an economic activity.

AREA M&E (abbr.) TITLE What, Why Econ (abbr.) NO. 1 (LAP) INTLS, kl (author) 166 PAGE 4

LEARNING ACTIVITIES (directions for)

SERIES: I X II_____ INDIVIDUAL_____ GROUP X

OBJECTIVE LETTER(S): A X B X C X D X E_____

A, B: Explain to students that economics is the process of making decisions to obtain the greatest satisfactions from limited resources.

Explain what is meant by "limited resources". Give examples, such as: land, labor, and capital. The energy crisis, etc. might be used to illustrate as well.

Make a transparency of "Economic Activities" page .

Go over each of the activities with the group.

Ask individual students to explain why each activity is economic in nature.

Ask students to identify other economic activities not presented on the transparency.

C: Assign students to small groups of 4 or 5.

Ask students to identify (select) a recorder and reporter for each group.

Each group should discuss the question, "Why study economics?"

The reporter of each group should tell his/her group's responses to the class.

D: Ask students to make lists of economic activities that they have engaged in during the past week.

Select 3 or 4 students to tell their activities, including explanations of why they are economic, to the group.

LEARNING ACTIVITIES (directions for)

SERIES: I ____ II X INDIVIDUAL ____ GROUP X

OBJECTIVE LETTER(S): A X B X C X D X E ____

A: Ask students to survey five people each to find out their responses to the question, "What Is Economics?". The people surveyed could be students, teachers, business persons or family members.

Each student should turn in a list of the five responses s/he received after checking the one that s/he feels is the most accurate.

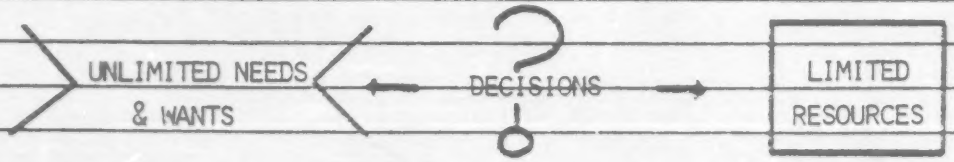
Compile the checked responses in a list and report these to the students (you may want to write them on a chalkboard for everyone to see or write them on a transparency).

Discuss these economic descriptions with students, concluding that economics is the process of making decisions to obtain the greatest satisfactions from limited resources.

B: Ask students to think about activities of their family members and identify those that are economic in nature.

Lead students in a discussion of the identified economic activities.

C: Draw a diagram on a chalkboard or transparency to show:



Explain that human needs and wants are endless but the resources needed to satisfy them are. That's the importance of economics -- learning how to make effective decisions to obtain maximum satisfactions from limited resources.

D: Question students about the economic activities that they have engaged in during the past week.

Discuss the responses given including explanations of why the activities are economic in nature.

AREA M&E (abbr.) TITLE What, Why Econ. (abbr.) NO. 1 (LAP) INTLS kl (author) PAGE 6

IN-LAP INSTRUCTIONAL MATERIALS

SERIES: I X II _____ INDIVIDUAL X GROUP _____

TYPE: Information Sheet (information sheet, transparency, etc) TITLE: Economics Is . . . (or heading)

LEARNING ACTIVITY: A X B X C _____ D _____ E _____

ECONOMICS IS . .

Economics is the process of making decisions to satisfy unlimited human needs and wants with limited resources.

Every time you decide to buy an ice cream cone, bake a cake, ride a bicycle, write with a pencil, go on a vacation, attend school, study for a test, etc., you are involved in economic activities.

WHY?

Why is the purchase of an ice cream cone an economic activity?

Why is studying for a test an economic activity?

What is meant by the statement:
"The more people get, the more they want"

What is meant by the phrase:
"You can't have your cake and eat it too"

IN-LAP INSTRUCTIONAL MATERIALS

SERIES: I X II _____ INDIVIDUAL X GROUP _____

TYPE: Information Sheet (information sheet, transparency, etc) TITLE: Why Economics? (or heading)

LEARNING ACTIVITY: A _____ B _____ C X D _____ E _____

WHY ECONOMICS??

Economics is an inherent part of everyone's life. It can't be avoided. Just as we cannot avoid the weather, we cannot avoid economics. It has always existed and will continue to exist as long as there is human life on this earth.

Economics is the process of deciding how to "get the most with the least", or in other words, deciding how to best satisfy endless needs and wants with limited resources.

We need to learn how to make appropriate decisions in order to do this successfully.

Sometimes, in order to meet future needs and wants, it is necessary to ignore or set aside current ones. For example, you plan to purchase a new ten speed bicycle so you postpone buying a new record album in order to save enough money for the bike. This represents prioritizing needs and wants and allocating resources to satisfy them.

Because our needs and wants are unlimited, but our resources (such as income, land, property, etc.) are, we need to understand the economic activities affecting our everyday lives in order to better satisfy our most important needs and wants.

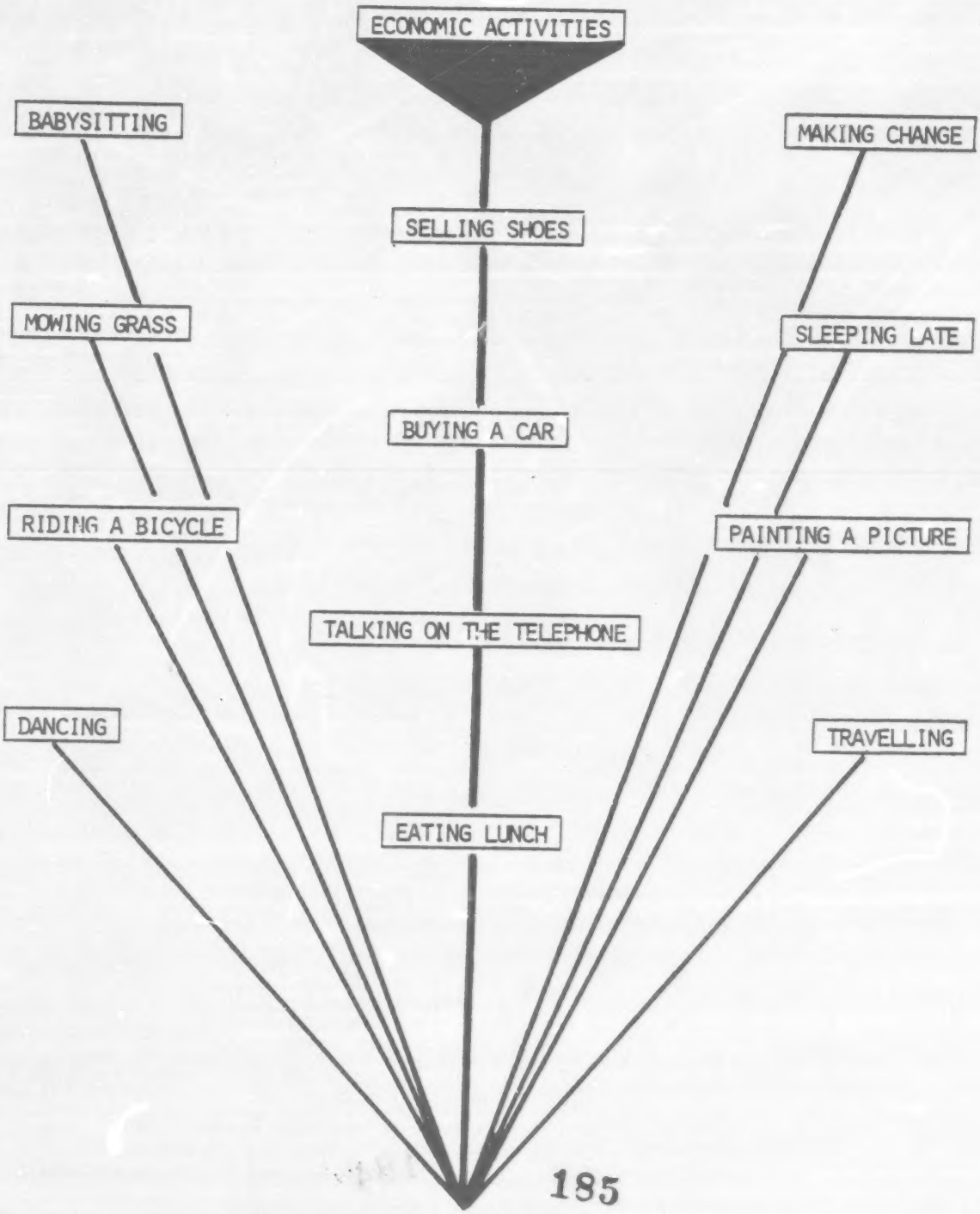
AREA M&E (abbr.) TITLE What, Why Econ (abbr.) NO. 1 (LAP) INTLS kl (author) PAGE 8

IN-LAP INSTRUCTIONAL MATERIALS

SERIES: I X II _____ INDIVIDUAL____ GROUP X

TYPE: Transparency (information sheet, transparency, etc) TITLE: Economic Activities (or heading)

LEARNING ACTIVITY: A X B X C_____ D_____ E_____



C

EVALUATION MATERIALS

PRETEST X POSTTEST _____ PRETEST KEY _____ POSTTEST KEY_____

OBJECTIVE LETTER(S): A X B X C X D X E_____

A. Circle the number beside the statement that best describes "economics".

1. The human needs and wants of individuals within a given society
2. Ways in which individuals within a society define differences in life style
3. The cost of goods offered for sale at given points in time.
4. Decisions that individuals make to obtain the greatest satisfactions from limited resources

B. Circle the number beside each of the following situations that represents an economic activity.

1. John Deere is working at Big Burger restaurant to earn money to buy a car
2. Janet Ray decides to sew a new dress instead of buying one already made at the store
3. The Local Bank officer approves a loan for Mrs. Dobbs at the current interest rate
4. Robert Duvall decides to skip school this afternoon in order to go to the movie theater to see a new film

C. Check the space beside the statement that best answers the question: "Why Study Economics?"

1. _____ Because it's as old as mankind
2. _____ It's a traditional subject
3. _____ It is a major part of everyone's life
4. _____ Because it deals with money

D. In a short paragraph, 3 - 6 sentences, describe the economic activities that you have been involved in today (or within the past few days).

_____

_____

_____

_____

AREA M&E (abbr.) TITLE What, Why Econ (abbr.) NO. 1 (LAP) INTLS kl (author) PAGE 10

EVALUATION MATERIALS

PRETEST _____ POSTTEST X PRETEST KEY _____ POSTTEST KEY_____

OBJECTIVE LETTER(S): A X B X C X D X E_____

A. Check the space beside the best description of "economics".

1. _____ The cost of goods sold by a business
2. _____ Profit making
3. _____ Satisfying needs with limited resources
4. _____ Spending money earned
5. _____ The minimization of expenses

B. Check the situations that represent economic activities.

1. _____ Sylvia Slater injured her knee while riding a skateboard and had to go to the hospital for treatment
2. _____ John's brother, Pete, bought a P.B. & J. ice cream cone
3. _____ Marion is flying a kite
4. _____ Skip is studying for an economics test
5. _____ Roger is working fulltime at Nobrand Supermarket this summer

C. Which of the following is the best reason for studying economics? (check one)

1. _____ It's required for graduation
2. _____ It's traditional in nature
3. _____ It affects everyone's life
4. _____ It deals with disposable income
5. _____ It represents the Gross National Product

D. Write a few sentences describing the economic activities that you have engaged in today (or within the past few days).

EVALUATION MATERIALS

PRETEST _____ POSTTEST _____ PRETEST KEY X POSTTEST KEY X

OBJECTIVE LETTER(S): A X B X C X D X E _____

PRETEST KEY:

A. Number 4 should be circled

B. Numbers 1, 2, 3, and 4 should be circled

C. Number 3 should be checked

D. At least one economic type activity should be described

Suggested Criterion Level = 100%

POSTTEST KEY:

A. Number 3 should be checked

B. Numbers 1, 2, 3, 4, and 5 should be checked

C. Number 3 should be checked

D. At least one economic type activity should be described

Suggested Criterion Level = 100%

APPENDIX I

Site and Learning Manager Background Information

SITE INFORMATION

Name of Institution _____

Address _____

_____

_____

How long has the distributive education program been in existence?

Number of years including current year _____

Level of Program _____ Secondary _____ Post Secondary _____

Other _____ Specify _____

_____

Is the program an in-school program (simulated, project method, etc.) or a cooperative program?

In-School _____

Cooperative _____

Other (describe) _____

_____

Is the program a general program or specialized program?

General _____

Specialized _____

Indicate area
of Specialization _____

How many students are enrolled in the program? _____

How many of the students would be involved in the field test? _____

How long has the program been utilizing the IDECC system? _____

LEARNING MANAGER'S BACKGROUND QUESTIONNAIRE

Name_____

School_____Address_____

City_____ State_____ Zip_____

How many years of experience have you had teaching in the field of marketing and distribution? (Include current year)

_____Years, Secondary Level _____Years, Post-Secondary Level

_____Years, Adult ___Part time/___Full time _____Years,other-Specify _____

How many years of occupational experience have you had in the field of marketing and distribution? _____Years

How long have you been teaching at your present school? _____Years (Include current year)

What is your highest level of formal education?___ _____

Are you currently using the IDECC system? _____Yes ____No

How long have you used the IDECC system? Answer even if you are not currently using the system, but have used it in the past._____

How often, on the average, have you used the IDECC system?

Describe frequency_____

Describe method of use_____

Have you been a writer of IDECC materials? _____Yes _____No

If yes, describe responsibilities._____

_____

Have you used any other competency based educational system? _____Yes ____No

If yes, describe._____

_____

APPENDIX J

Field Test Assignment Form

FIELD TEST ASSIGNMENT SHEET

Package and Site Number	Number Assigned Packages	Evaluation Returned	
		Teacher	Student

APPENDIX K

Field Test Observation Form

FIELD TEST OBSERVATION REPORT

Site _____

Learning Manager _____

I. Students were utilizing the field test materials at the time of the visit.

Yes ____ No ____

If no, indicate why not. _____

_____

_____

If yes, answer the following:

1. Students appear to be interested in working with the field test materials.

Yes ____ No ____

If no, give rationale for this observation. _____

_____

_____

_____

2. Students are meeting the objectives of the packages within a reasonable length of time.

Yes ____ No ____

If no, indicate the information obtained which has caused the delay.

_____

_____

_____

FIELD TEST OBSERVATION (continued)

II. The administration is supportive of the field test.

Yes _____ No _____

If no, suggest what may be done to gain this support.

_____

_____

III. Learning activity packages are being evaluated and returned according to schedule.

Yes _____ No _____

If no, what is the delay? _____

_____

_____

IV. Learning manager is effectively working with the students in implementing the field test packages.

Yes _____ No _____

If no, describe problem areas. _____

_____

_____

V. List any problems or concerns of the learning manager.

_____

_____

_____

VI. Additional Comments.

_____

_____

_____

_____
Observer

196 _____
Date of Observation

APPENDIX L

Student and Learning Manager's Evaluation Forms

EVALUATION CODE _____
(Site # and Package #)

LEARNING MANAGER
LEARNING ACTIVITY PACKAGE EVALUATION

Learning Activity Package #_____ Curriculum Section _____

PRETEST (Circle one)

---

1. The Pretest measures each of the objectives in the package. YES NO
2. It is easy to distinguish in the Pretest which objectives were met and which were not. YES NO
3. The directions were clear in the Pretest. YES NO
4. The educational level of the Pretest is satisfactory for the competency (ies) being developed. YES NO

Additional comments: _____

_____

_____

PRETEST KEY (Circle one)

---

1. The pretest key states criteria of acceptable performance for each objective. YES NO
2. The criteria of acceptable performance is at a realistic level. YES NO
3. The answers for the objective tests are correct. YES NO
4. Possible answers or solutions are given for subjective tests. YES NO
5. All answers are clearly stated. YES NO

Additional comments: _____

_____

_____

_____

POSTTEST (Circle one)

1. The Posttest measures each of the objectives in the package. YES NO
2. It is easy to distinguish in the Posttest which objectives were met and which were not. YES NO
3. The directions were clear in the Posttest YES NO
4. The educational level of the Posttest is satisfactory for the competency (ies) being developed. YES NO

Additional comments: _____

_____

POSTTEST KEY (Circle one)

1. The posttest key states a criteria of acceptable performance for each objective. YES NO
2. The criteria of acceptable performance is at a realistic level. YES NO
3. The answers for the objective tests are correct. YES NO
4. Possible answers or solutions are given for subjective tests. YES NO
5. All answers are clearly stated. YES NO

Additional comments: _____

_____

FORMAT (Circle one)

1. The format of the material is easy to use. YES NO

If no, why not? _____

_____

CONTINUED ON FOLLOWING PAGE

FORMAT (continued) (Circle one)

2. The Student Learning Activity Package included the following items:

Pretest	YES	NO
An Individual Learning Activity for each objective	YES	NO
An alternate Individual Learning Activity for each objective	YES	NO
The first Individual Activities include appropriate materials for self-contained use	YES	NO
Complete bibliography for resources with page numbers if needed	YES	NO

3. The learning manager's section for each package includes:

LAP title	YES	NO
Competency number(s) and statement(s)	YES	NO
Objective(s)	YES	NO
Group Activity for each objective	YES	NO
Alternate group activity for each activity	YES	NO
Materials needed for instruction	YES	NO
Complete bibliography for resources with page numbers if needed.	YES	NO

4. Additional materials provided:

Posttest	YES	NO
Pretest Keys	YES	NO
Posttest Keys	YES	NO

Additional comments: _____

_____

_____

_____

Additional Overall Evaluation Comments: _____

_____

_____

_____

LEARNING MANAGER

EVALUATION OF OBJECTIVE

AND

LEARNING ACTIVITIES

(Include one for each objective)

OBJECTIVE (Circle One)

1. The objective is consistent with the competency (ies) to be developed in the package. YES NO
2. The objective is clear. YES NO
3. The objective is measurable. YES NO

Additional comments: _____

_____

I. INDIVIDUAL LEARNING ACTIVITY (Circle One)

1. The activities are clearly stated YES NO
2. Self-contained instructional materials are provided for the activity. YES NO
3. The self-contained instructional materials are:
   a. clearly marked so the student can find them. YES NO
   b. clear and understandable. YES NO
   c. on the educational level of the student. YES NO
   d. interesting and appealing to the student. YES NO
4. The activity developed the knowledge, skill, or attitude to meet the objective. YES NO

Evaluation of Objective _____ (continued) 188
Include for each objective

(Circle One)

5. Is there any indication of sex or racial bias? YES NO

Additional comments: _____

_____

II. ALTERNATE INDIVIDUAL LEARNING ACTIVITY (Circle One)

1. The directions for the activity are clear. YES NO
2. If resources are cited at least two references are provided. YES NO
3. The resources cited contributed to the development of the knowledge, skill, or attitude to meet the objective YES NO
4. The activity developed the knowledge, skill, or attitude needed to meet the objective. YES NO
5. If an outside activity is recommended, the activity is feasible. If not, why not? YES NO

_____

6. Is there any indication of sex or racial bias? YES NO

Additional Comments: _____

III. GROUP LEARNING ACTIVITY (Circle One)

---

1. The directions for the activity are clear. YES NO
2. The group activity held the interest of the students. YES NO
3. If instructional materials are provided:
   a. The materials are clear in content. YES NO
   b. The materials are reproducible. YES NO

Evaluation of Objective _____ (continued)
Include for each objective

GROUP ACTIVITY (continued) (Circle One)

c. The materials contribute to learning of the objective. YES NO

d. Transparencies are clear in content. YES NO

e. Transparencies are reproducible. YES NO

f. Transparencies contribute to learning of the objective. YES NO

g. Materials are provided where needed. YES NO

If any of the above are circled no, describe deficiency:

4. If other materials are provided or listed for instructions, they are:

a. clear YES NO

b. relevant YES NO

5. The activity developed the knowledge, skill, or attitude needed to meet the objective. YES NO

6. Is there are indication of sex or racial bias? YES NO

7. If reading resources are recommended, at least two references are listed. YES NO

Additional comments; _____

IV. ALTERNATE GROUP LEARNING ACTIVITY (Circle One)

1. The directions for the activity are clear. YES NO

2. The group activity held the interest of the students. YES NO

Evaluation of Objective _____ (continued) 190
Include for each objective

ALTERNATE GROUP LEARNING ACTIVITY (continued) (Circle One)

If handouts and/or transparencies are provided:

a. The materials are clear in content.	YES	NO
b. Handouts are reproducible.	YES	NO
c. Handouts contribute to learning of the objective.	YES	NO
d. Transparencies are clear in content.	YES	NO
e. Transparencies are reproducible.	YES	NO
f. Transparencies contribute to learning of the objective.	YES	NO
g. Materials are provided where needed.	YES	NO

If any of the above are circled no, describe deficiency:

---

4. If other materials are provided or listed for instructions, they are:		
a. clear	YES	NO
b. relevant	YES	NO
5. The activity developed the knowledge, skill, or attitude needed to meet the objective.	YES	NO
6. Is there any indication of sex or racial bias?	YES	NO
7. If reading resources are recommended, at least two or more references are listed.	YES	NO

Additional comments: _____

Evaluation of Objective _____ (continued) 191
Include for each objective

GENERAL QUESTION ON LEARNING ACTIVITIES	(Circle One)
1. The activities include a variety of activities including non-reading and non-writing activities where appropriate.	YES NO

Evaluation Code____
(Site #, LAP #, Student#)

LEARNING ACTIVITY PACKAGE 192

Student Evaluation

(Circle One)

1. Were the directions easy to read and understand? YES NO

   If no, why? _____

   _____

2. Did you like using this learning activity package? YES NO

   If no, explain. _____

   _____

3. Which learning activities did you use? Indicate letter of activity.

   Individual _____

   Alternate Individual _____

   Group _____

   Alternate Group _____

4. Did the learning activities help you to learn what you needed to know? YES NO

   If no, which activity (ies) were not helpful? Indicate letter of activity within appropriate group. (Do not comment on activities not used.)

   Individual _____

   Alternate Individual _____

   Group _____

   Alternate Group _____

5. Did the objective (s) tell you exactly what was expected of you? YES NO

   If no, which objective (s) were not clear?

   _____

6. How much time did it take you to learn the material in the package? Indicate to closest minutes. _____

Student Evaluation (continued)

193

(Circle One)

7. If outside resources were used,

   a. Did you find the needed information on the pages that were assigned? YES NO

   b. Were the resources easy to read and understand? YES NO

8. Were the pretest questions clear and fair? YES NO

   If no, explain why: _____

   _____

   _____

9. Were the post test questions clear and fair? YES NO

   If no, explain why; _____

   _____

   _____

10. If handouts were used, did they pertain to what you had to learn? YES NO

11. Did you need help from your learning manager to complete this learning activity package? YES NO

    If yes, explain what kind of help. _____

    _____

12. If a self check is included did it help you determine if you are ready to take the posttest? YES NO

13. What did you like best about this learning package?

    _____

    _____

    _____

14. What did you like least about this learning activity package?

    _____

    _____

    _____

Student Evaluation (continued) 194

(Circle One)

15. At this time, do you think you have developed the knowledge, skill, or attitude needed to meet the objective (s) in this package? YES NO

APPENDIX M

Student/Class Records

CLASS ACHIEVEMENT RECORD

Learning Activity Package #	Number of Students Assigned the Package	Number of Students to Pass Post Test	Number of Students to Complete each Activity				Average Time of Completion of Individual Activities
			Individual	Alternate Individual	Group	Alternate Group	

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FT-7

STUDENT LEARNING ACTIVITY

ASSIGNMENT SHEET

Student Name _____ Occupation _____

Learning Activity Packages Assigned	Learning Activity(ies) Used	Level of Performance	Time Taken to Develop The Competencies in the Package

APPENDIX N

Evaluation and Achievement Summary Forms

SUMMARY Package # _____

of

LEARNING MANAGERS' EVALUATIONS

FOR

LEARNING ACTIVITY PACKAGES

PRETEST	Evaluation Tally Yes	No
1. The pretest measures each of the objectives in the package		
2. It is easy to distinguish in the pretest which objectives were met and which were not.		
3. The directions were clear in the pretest.		
4. The educational level of the pretest is satisfactory for the competency(ies) being developed.		

Additional comments: _____

PRETEST KEY	Evaluation Tally Yes	No
1. The pretest key states criteria of acceptable performance for each objective.		
2. The criteria of acceptable performance is at a realistic level.		
3. The answers for the objective tests are correct.		

SUMMARY OF LEARNING MANAGERS' EVALUATIONS 200

for LEARNING ACTIVITY PACKAGE # _____

PRETEST KEY (continued)	Evaluation Tally Yes	No
4. Possible answers or solutions are given for subjective tests.		
5. All answers are clearly stated.		

Additional comments: _____

POSTTEST	Evaluation Tally Yes	No
1. The posttest measures each of the objectives in the package.		
2. It is easy to distinguish in the posttest which objectives were met and which were not.		
3. The directions were clear in the posttest.		
4. The educational level of the posttest is satisfactory for the competency(ies) being developed.		

Additional comments: _____

SUMMARY OF LEARNING MANAGER'S EVALUATIONS

201

for LEARNING ACTIVITY PACKAGE # _____

POSTTEST KEY	Evaluation Tally Yes	No
1. The posttest key states a criteria of acceptable performance for each objective.		
2. The criteria of acceptable performance is at a realistic level.		
3. The answers for the objective tests are correct.		
4. Possible answers or solutions are given for subjective tests.		
5. All answere are clearly stated.		

Additional comments: _____

FORMAT	Evaluation Tally Yes	No
1. The format of the materials is easy to use.		

If no, why not? _____

SUMMARY OF LEARNING MANAGER"S EVALUATIONS

for LEARNING ACTIVITY PACKAGE # _____

FORMAT (continued)	Evaluation Tally Yes	No
2. The Student Learning Activity Package included the following items:		
Pretest		
An Individual Learning Activity for each objective		
An Alternate Individual Learning Activity for each objective		
The first Individual Activities include appropriate materials for self-contained use		
Complete bibliography for resources with page numbers if needed		
3. The Learning Manager's Section for each package included:		
LAP title		
Competency number(s) and statements(s)		
Objective(s)		
Group Activity for each objective		
Alternate Group Activity for each activity		
Materials needed for instruction		
Complete bibliography for resources with page numbers if needed		
4. Additional materials provided:		
Posttest		
Pretest Keys		
Posttest Keys		

SUMMARY OF LEARNING MANAGER'S EVALUATIONS 203

for LEARNING ACTIVITY PACKAGE # _____

	Evaluation Tally	
FORMAT (continued)	Yes	No

Additional comments: _____

Additional Overall Evaluation Comments: _____

SUMMARY OF LEARNING MANAGERS' EVALUATION 204

for LEARNING ACTIVITY PACKAGE # _____

OBJECTIVE	Evaluation Tally Yes	No
1. The objective is consistent with the competency(ies) to be developed in the package.		
2. The objective is clear.		
3. The objective is measurable.		

Additional comments: _____

INDIVIDUAL LEARNING ACTIVITIES	Evaluation Tally Yes	No
1. The directions for the activity are clear.		
2. Self-contained instructional materials are provided for the activity.		
3. The self-contained instrucitonal materials are:		
a. clearly marked so the student can find them		
b. clear and understandable		
c. on the educational level of the student.		
d. interesting and appealing to the student.		
4. The activity developed the knowledge, skill, or attitude to meet the objective.		

SUMMARY OF LEARNING MANAGERS' EVALUATION 205

for LEARNING ACTIVITY PACKAGE # _____

INDIVIDUAL LEARNING ACTIVITIES (continued)

Additional comments: _____

ALTERNATE INDIVIDUAL LEARNING ACTIVITIES	Evaluation Tally Yes	No
1. The directions for the activity are clear.		
2. If resources are cited at least two references are provided.		
3. The resources cited contributed to the development of the knowledge, skill, or attitude to meet the objective		
4. The activity developed the knowledge, skill or attitude needed to meet the objective.		
5. If an outside activity is recommended, the activity is feasible. If no, why not.		
6. Is there any indication of sex or racial bias?		

Additional comments: _____

SUMMARY OF LEARNING MANAGERS' EVALUATIONS

for LEARNING ACTIVITY PACKAGE # _____ 206

GROUP ACTIVITY	Evaluation Tally Yes	No
1. The directions for the activity are clear.		
2. The group activity held the interest of the students.		
3. If handouts and/or transparencies are provided:		
a. Handouts are clear in content.		
b. Handouts are reproducible.		
c. Handouts contribute to learning of the objective.		
d. Transparencies are clear in content.		
e. Transparencies are reproducible.		
f. Transparencies contribute to learning of the objective.		
g. Handouts and transparencies are provided where needed.		

If no, describe deficiency: _____

_____

_____

_____

_____

_____

4. If other materials are provided or listed for instructions, they are:		
a. clear		
b. relevant		

SUMMARY OF LEARNING MANAGERS' EVALUATION 207

for LEARNING ACTIVITY PACKAGE # _____

GROUP ACTIVITY (continued)	Evaluation Tally Yes	No
5. The activity developed the knowledge, skill, or attitude needed to meet the objective.		
6. Is there any indication of sex or racial bias?		
7. If reading resources are recommended, at least two references are listed.		

Additional comments: _____

ALTERNATE GROUP ACTIVITY	Evaluation Tally Yes	No
1. The directions for the activity are clear.		
2. The group activity held the interest of the students.		
3. If handouts and/or transparencies are provided:		
a. Handouts are clear in content.		
b. Handouts are reproducible.		
c. Handouts contribute to learning of the objective.		
d. Transparencies are clear in content.		

SUMMARY OF LEARNING MANAGERS' EVALUATIONS

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for LEARNING ACTIVITY PACKAGE # _____

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Overall Evaluation Comments: _____

Evaluation Tally

GENERAL QUESTION ON LEARNING ACTIVITIES	Yes	No
1. The activities include a variety of activities including non-reading and non-writing activities where appropriate.		

SUMMARY OF LEARNING MANAGERS' EVALUATION

for LEARNING ACTIVITY PACKAGE # _____

ALTERNATE GROUP ACTIVITY (continued)	Evaluation Tally Yes	No
e. Transparencies are reproducible.		
f. Transparencies contribute to learning of the objective.		
g. Handouts and transparencies are provided where needed.		

If no, describe deficiency: _____

	Yes	No
4. If other materials are provided or listed for instructions, they are:		
a. clear		
b. relevant		
5. The activity developed the knowledge, skill, or attitude needed to meet the objective.		
6. Is there any indication of sex or racial bias?		
7. If reading resources are recommended, at least two or more references are listed.		

Additional comments: _____

SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE # _____

	Tally	
	Yes	No
1. Were the directions easy to read and understand? If no, why? _____		
2. Did you like using this learning activity package? If no, explain _____		
3. Which learning activities did you use? Indicate letter of activity. I. Individual _____ II. Alternate Individual _____ III. Group _____ IV. Alternate Group _____		

SUMMARY OF STUDENT EVALUATION
FOR
LEARNING ACTIVITY PACKAGE # _____

4. Did the learning activities really help you to learn what you needed to know?

   If no, which activity(ies) were not helpful? Indicate letter of activity within appropriate group. (Do not comment on activities not used.)

   Comments _____

Tally	Yes	No
Individual		
Alternate Individual		
Group		
Alternate Group		

5. Did the objective(s) tell you exactly what was expected of you?

   If no, which objective was not clear? _____

Yes	No

6. How much time did it take you to learn the material in the package? Indicate to closest minutes.

List Times

228

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SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE # _____

	Tally	
	Yes	No
7. If outside resources were used,		
a. Did you find the needed information on the pages that were assigned?		
b. Were the resources easy to read and understand?		
8. Were the pre-test questions clear and fair? If not, explain _____		
9. Were the post test questions clear and fair? If not, explain _____		

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SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE # _____

531

	Tally	
	Yes	No
10. If handouts were used, did they pertain to what you had to learn? Comments _____		
	Yes	No
11. How much help did you need from your learning manager to complete this learning activity package? If yes, explain what kind of help: _____		

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SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE # _____

	Tally Yes	Tally No
12. If a self check is included did it help you determine if you are ready to take the posttest? Comments _____		

13. What did you like best about this learning activity package?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

SUMMARY OF STUDENT EVALUATIONS
FOR
LEARNING ACTIVITY PACKAGE # _____

14. What did you like least about this learning activity package? _____

15. At this time, do you think you have developed the knowledge, skill, or attitude needed to meet the objective(s) in this package?

	Yes	No

Comments: _____

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SUMMARY

of

STUDENT ACHIEVEMENT DATA

for

LEARNING ACTIVITY PACKAGE # _____

Number of Packages Field Tested	Number of Students Completing Package	Average Level of performance	Average Time of Completion

Number of Times Individual Activity is used	Number of Times Alternate Individual Activity is used	Number of times Group Activity is used	Number of Times Alternate Group Activity is used

REVISIONS

for

LEARNING ACTIVITY PACKAGE # _____

PRETEST	Revision Made Indicate Attachments
Revisions Needed:	
PRETEST KEY	**Revisions Made Indicate Attachments**
Revisions Needed:	

POSTTEST	Revisions Made Indicate Attachment
Revisions Needed:	

POSTTEST KEY	Revisions Made Indicate Attachment
Revisions Needed:	

FORMAT	Revisions Made Indicate Attachments
Revisions Needed:	

OBJECTIVE(S) Indicate letter of objective with revision comment	Revisions Made Indicate Attachments
Revisions Needed:	

Objective _____

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REVISIONS FOR LEARNING ACTIVITY PACKAGE # _____

(Include this form for each objective)

I	INDIVIDUAL LEARNING ACTIVITY Revisions Needed:	Revisions Made Indicate Attachment
II	ALTERNATE INDIVIDUAL LEARNING ACTIVITY Revisions Needed:	
III	GROUP ACTIVITY Revisions Needed:	
IV	ALTERNATE GROUP ACTIVITY Revisions Needed:	